

RELATIONAL HEALTH AND DISORDERED EATING IN
BLACK, LATINA, AND WHITE FEMALE COLLEGE STUDENTS

By

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TABLE OF CONTENTS

	<u>page</u>
ACKNOWLEDGMENTS	ii
ABSTRACT	vi
 CHAPTERS	
1 INTRODUCTION	1
Overview	1
Theoretical Framework	4
Statement of the Problem	6
Need for the Study	9
Purpose of the Study	12
Rationale for the Approach	13
Research Questions	15
Definition of Terms	16
2 REVIEW OF THE LITERATURE	19
Introduction	19
Theoretical Model	19
Risk Factors for Disordered Eating in College Women	27
Sociocultural Environment	28
Adjustment to College	33
Race and Ethnicity	36
Protective Factors Against Disordered Eating in College Women	40
Peer Relationships	41
Mentor Relationships	47
Community Relationships	52
Chapter Summary	58
3 METHODOLOGY	60
Overview	60
Population	60
Sampling and Sampling Procedures	61
Design	61

Instrumentation	62
Relational Health Indices	62
Eating Attitudes Test-26	64
Data Analysis	67
Hypothesis and Research Questions.....	67
Hypothesis.....	67
Research Questions.....	67
4 RESULTS	70
Data Collection.....	70
Data Analyses.....	71
Hypothesis.....	71
Research Questions.....	73
5 DISCUSSION	81
Hypothesis Summary and Explanation of Finding	81
Research Questions and Explanations of Findings	83
Limitations of the Study	90
Implications of the Findings and Recommendations	91
Implications for Theory	92
Implications for Practice	93
Implications for Research	94
Summary	95
APPENDICES	
A COVER LETTER.....	97
B THE RELATIONAL HEALTH INDICES.....	98
C THE EATING ATTITUDES TEST-26.....	101
REFERENCES	102
BIOGRAPHICAL SKETCH	123

Abstract of Dissertation Presented to the Graduate School
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The purpose of this study was to examine the relationship between Black, Latina, and White female college students' relational health, specifically peer, mentor, and community relationships, and disordered eating attitudes and behaviors. Relational health was defined according to the constructs of mutuality, authenticity, and empowerment or zest within the Stone Center's Relational Model, a theory of women's psychological development. Participants in the study were 237 Black, Latina, and White female undergraduate students who completed the Relational Health Indices and the Eating Attitudes Test-26. Results of this study showed a significant correlation between peer and community relationships and disordered eating. No association between mentor relationships and disordered eating was detected. Between group differences among the three ethnic groups was not a significant research result. The implications of these findings for theory, practice, and research are discussed.

CHAPTER 1 INTRODUCTION

Overview

Researchers consistently report that between 4 and 18 percent of female college students meet the criteria for the clinical eating disorders of anorexia nervosa, bulimia nervosa, and binge-eating disorder (Drewnowski, Yee, & Krahn, 1988; Hesse-Biber, Marino, & Watts-Roy, 1999; Mintz & Betz, 1988; Pope, Hudson, Yurglen-Todd, & Hudson, 1984; Pyle, Neuman, Halvorson, & Mitchell, 1991). Furthermore, between 60 and 80 percent of college women engage in subclinical eating disorders which are characterized by excessive dieting and exercising, fasting, and other harmful behaviors that fall short of the criteria set by clinical eating disorder scales (Hesse-Biber et al., 1999) yet represent characteristics which are a part of a continuum of disordered eating (Scarano & Kalodner-Martin, 1994; Tylka & Subich, 1999). Many of these weight and body image concerns or even obsessions are so common on college campuses that they have become normalized by our current sociocultural environment (Hesse-Biber, 1996).

The negative impact of disordered eating on physical and psychological health and on social and vocational functioning has been documented extensively (Kaplan & Woodside, 1987; Katzman & Wolchik, 1984; Mizes, 1988; Sharp & Freeman, 1993; Williamson, Kelley, Davis, Ruggiero, & Bloudin, 1985). Women who have an eating disorder report a wide variety of physical and psychological symptoms, including dizziness, sleep disturbance, gastrointestinal complaints, anxiety, depression, and

substance abuse (Mitchell, 1984). Furthermore, these girls and women often experience interpersonal difficulties, including conflicted relationships with family members, social alienation, interpersonal distrust, and impaired sexual functioning (Coovert, Kinder, & Thompson, 1989; Evans & Wertheim, 1998; Grissett & Norvell, 1992; Thelen, Farmer, Mann, & Pruitt, 1990).

Most of the eating disorder research to date has focused primarily on White women, often to the exclusion of other racial or ethnic groups (Lester & Petrie, 1998). Only a small number of studies in the United States have specifically observed eating disorder symptomatology in women of color (e.g., Abrams, Allen, & Gray, 1993; Akan & Grilo, 1995; Altabe, 1998; Anderson & Hay, 1985; Caldwell, Brownell, & Wilfrey, 1997; Fitzgibbon, Spring, Avellone, Blackman, Pingitore, & Stolley, 1998; Grange, Telch, & Agras, 1997; Gray, Ford, & Kelly, 1987; Hiebert, Felice, Wingard, Munoz, & Ferguson, 1988; Lester & Petrie, 1998; Lester & Petrie, 1995; Nevo, 1985; Pumariega, Edwards, & Mitchell, 1984; Robinson & Andersen, 1985; Rucker & Cash, 1992; Siber, 1986). In addition, only a few of these studies specifically examined disordered eating in female college students of color. Root (1990) has suggested that even though certain factors in minority cultures, such as an appreciation of a healthier body size and a stable extended family and social structure, may protect some minority women from disordered eating, the reality of within-group individual differences has been largely ignored.

Smolak and Levine (1996) report that disordered eating begins most commonly during adolescence, the transitional period of growth between puberty and adulthood. This is a time when a young girl needs to meet major developmental tasks and master the developmental issues of separating from the family (Chatoor, 1999). Concurrently, a

young girl feels pressure to adapt to puberty when her body proportions change from those of a child to those of a young adult (Surrey, 1991a). She needs to make the transition between loosening the ties with her parents and increasing her dependency on her peers. In order to find her place in her peer group, she needs to deal with personal and cultural values regarding body image, sexuality, and achievement (Chatoor, 1999). In addition to all of these life challenges, the stressful event of leaving home for college intensifies these developmental difficulties for young women and sets the stage for struggles with disordered eating (Martz & Bazzini, 1999). Young women of color face additional hardships in coping with the vagaries of college life as they discover the lack of available connection to minority women role models and mentors in the university environment (Turner, 1997).

Many traditional theories of human psychological development focus on the consolidation of an autonomous identity through separation and individuation from parental figures (Tantillo, 1998). Relational theory posits that the construction of the self for women occurs through psychological connection and mutual sharing (Gilligan, 1982; Jordan, 1986, 1995, 1997; Jordan, Kaplan, Miller, Stiver, & Surrey, 1991; Kaplan & Klein, 1985; Mikel-Brown & Gilligan, 1992; Miller, 1976, 1984, 1986, 1988; Stern, 1990; Surrey, 1985). Miller & Stiver (1997) state that a female's sense of self and of worth is most often grounded in the ability to make and maintain relationships. Furthermore, it has been proposed that women who fail to recognize and meet their needs for interpersonal connectedness struggle with higher levels of eating pathology than those who value their relationships (Steiner-Adair, 1990; Surrey, 1991a).

Although all students contend with difficulties related to adjustment to college, this transition is generally more difficult for racial/ethnic minority students than for White students (Gloria & Rodriguez, 2000). Ponterotto (1990) reviewed demographic trends, enrollments, and attrition and graduation rates for Black and Latino students. He indicated that minority students were more likely than White students to report feelings of isolation and often feel unwelcomed and unappreciated on predominately White college campuses. It is possible that these adaptation struggles and feelings of isolation affect the mental and physical well-being of college women of color and may be manifested in the attitudes and behaviors of disordered eating.

Currently, there is little research focused specifically on college women who engage in disordered eating and their relationships, and research on the relationships of eating disordered minority college women is virtually nonexistent. Looking more closely at the dynamics between eating disordered behaviors and relationships may help increase the understanding of the struggles of college women and potentially provide inroads for effective education, prevention, and intervention strategies.

Theoretical Framework

The importance of social support and relationships in girls' and women's lives has been studied extensively from various perspectives (Buehler & Legg, 1993; Evans & Wertheim, 1998; Fuhrer, Stansfeld, Chemali, & Shipley, 1999). Researchers have indicated that the nature and quality of girls' and women's relationships appear to be more meaningful to their psychological health than their overall number or specific interpersonal structure (Gilligan, Lyons, & Hammer, 1990; Hobfoll, 1986; Lu & Argyle, 1992). In particular, those growth-fostering relationships that are intimate and mutual

have the ability to foster self-disclosure, coping strategies, emotional resiliency, and additional social support (Genero, Miller, Surrey, & Baldwin, 1992; Miller & Stiver, 1997).

In accordance with these principles, feminist scholars and researchers at the Stone Center at Wellesley College have developed a theory called the Relational Model, which is a paradigm for the understanding of female psychological development and well-being (Jordan et al., 1991). Whereas Erickson's model of psychosocial development focuses on the task of separation-individuation for healthy adolescent development (Erickson, 1963), Relational Model theorists conceptualize ongoing, growth-fostering connection as critical to women's healthy psychological development (Jordan, 1997; Surrey, 1985). The Relational Model proposes that as relationships grow, so grows the individual. Participating in growth-fostering relationships is both the source and goal of girls' and women's psychological development (Miller & Stiver, 1997).

The relational qualities of mutual engagement, authenticity, and empowerment or zest have been shown to be important in the arenas of both intrapersonal and interpersonal growth. The Relational Model defines engagement as perceived mutual involvement, commitment, and attunement (Surrey, 1991b). Engagement may have a beneficial impact on individuals as well as relationships as indicated in studies on empathy and closeness. These qualities of engagement mediate stress and depression and are associated with self-actualization, self-esteem, low interpersonal distress, and relationship satisfaction (Beeber, 1998; Burnett & Demnar, 1996; Gawronski & Privette, 1997; Schreurs & Buunk, 1996; Sheffield, Carey, Patenaude, & Lambert, 1995). Authenticity is not a static state that is achieved at a discrete moment in time, but rather a

girl's or woman's ongoing ability to represent herself in a relationship with increasing truth and fullness and thereby acquire knowledge of self and other (Miller & Stiver, 1997). Research on authentic self-disclosure and openness appears to be related to being liked, increased liking of others, and motivation in relationships (Collins & Miller, 1994; Kay & Christophel, 1995). Empowerment or zest, the experience of feeling personally strengthened, encouraged, and thereby motivated to take action (Liang, Tracy, Taylor, Williams, Jordan, & Miller, 2000), has been shown to have a direct impact on positive affect, meaningful activity, and creativity (Hall & Nelson, 1996; Spreitzer, 1995).

When considering a female's important growth-fostering relationships outside of her immediate family, close ties with peers and adult mentors and affiliation with some type of community are three of the most significant types of connections in later adolescence and young adulthood (Gilligan et al., 1990; Hagerty, Williams, Coyne, & Early, 1996; Leadbeater & Way, 1996). Though the importance of these three types of relationships in female psychological development has been mentioned in the literature, there has been little empirical research within these sociocultural arenas especially related to the connections of college age woman. In addition to which, there is even less research specifically focused on relational dynamics and disordered eating in the female college population (Rorty, Yager, Buckwalter, & Rossotto, 1999).

Statement of the Problem

Colleges and universities across the nation are reporting dramatic increases in the past two decades in disordered eating attitudes and behaviors among their female students (Hesse-Biber, 1996). Many college women who are at normal weights regularly express a strong desire to be thinner and to hold beliefs about food and body image that are

similar to those of women who have clinical eating disorders (Hesse-Biber et al., 1999). A number of researchers have concluded that instead of viewing eating disorders as discrete categories, anorexia nervosa, bulimia nervosa, and binge eating disorder may actually be at the extreme end of a complex continuum of a person's relationship to food and her body (Hart, 1985; Scarano & Kalodner-Martin, 1994). At one end of the continuum, individuals express satisfaction with their body image and a desire to practice healthy eating and lifestyle habits. The other end of the continuum is marked by excessive weight loss and/or cycles of binge eating with or without purging via fasting, vomiting, laxative abuse, diet pills, and/or excessive exercise. A wide range of other attitudes and behaviors related to food and body image otherwise known as subclinical eating disorders exist between the opposing poles of this continuum (Hesse-Biber et al., 1999; Shisslak & Crago, 1994; Tylka & Subich, 1999). The potential negative physical and psychological ramifications of these varied attitudes and behaviors are numerous.

Eating disorders are associated with serious and even fatal medical complications (Lemberg, 1999; Pomeroy, 1996). Mortality in anorexia nervosa can range from 6% to 20% in the clinical population (Crisp, Callender, Halek, & Hsu, 1992). Recent studies have shown that even with treatment, only about one half of the affected clinical population recover and up to one half of this remaining group are severely disabled by chronic sequela of the disorder (Cavanaugh & Lemberg, 1999). Death is most often a result of starvation, fluid and electrolyte abnormalities, or suicide (Beumont, Russell, & Touyz, 1993). A distressing number of patients with bulimia nervosa also die, usually from cardiac arrhythmias related to electrolyte imbalances (Cavanaugh & Lemberg, 1999). Although death secondary to binge eating is uncommon, fatalities do occur from

complications such as gastric rupture or tearing (Lemberg, 1999). Many other chronic physical maladies are directly related to the continuum of disordered eating such as cardiac complications, bowel dysfunction, renal electrolyte abnormalities, alterations of endocrine function, pulmonary complications, and dental problems (Pomeroy, 1996).

The psychological features of anorexia nervosa, bulimia nervosa, and binge eating disorder are often similar. They may include depression, anxiety, low self-esteem, the need for approval and acceptance by others, difficulty expressing anger and frustration, and feelings of disgust and guilt associated with their eating disorder (Evans & Wertheim, 1998; Surrey, 1991a). These feelings may become magnified as the disorder progresses and the affected girl or woman may become more socially isolated, withdrawn, and obsessed with losing weight (Lemberg, 1999). Concentration difficulties related to malnutrition, preoccupation with food and exercise, and depression are also common and oftentimes interfere with academic performance (Thurstin, 1999).

A critical developmental challenge for adolescent girls in our culture is to come to terms with the biological changes accompanying pubertal development (Striegel-Moore & Cachelin, 1999). The accompanying adolescent growth spurt, the normal tendency to gain weight, and the significant increase in body fat relative to overall weight are important factors in girls' developing preoccupation with culturally mandated thinness (Wooley & Wooley, 1980). Certain facets of the college social environment also exacerbate this focus on thinness. Because college is a time in which dating serves an important social function and appearance is a critical determinant of partner attraction, the pressure on young women to be attractive which directly equates with low body weight is especially salient during these years (Martz & Bazzini, 1999).

Traditional theories of psychodynamic object relations and family systems ascribe the fundamental problems of eating disorders as a failure to separate and individuate from familial connections and a failure to gain a sense of independence and autonomy in relationships (Fishman, 1995; Friedlander & Siegal, 1990; Rhodes & Kroger, 1992). Contemporary researchers and theorists have challenged the validity and applicability of these constructs to girls and women (e.g., Gilligan, 1982; Gilligan et al., 1990; Guisinger & Blatt, 1995; Jordan, 1991; Lang-Takac & Osterweil, 1992; Rude & Burnham, 1995; Steiner-Adair, 1990; Surrey, 1991a) and these researchers and theorists now state that the formation and maintenance of relationships and connections to others is critical to female identity development (Gilligan, Rogers, & Tolman, 1991; Kenny, 1987; Lapsley, Rice, & Shadid, 1989; McDermott, Robillard, Char, Hsu, Tseng, & Ashton, 1983). In addition, the importance that girls and women attach to maintaining relationship connections with others has been overlooked in the majority of previous eating disorder research (Friedlander & Siegal, 1990; Steiner-Adair, 1991).

Need for the Study

Numerous theoretical models have been proposed to explain the etiology of eating disorders. Several domains including the socio-cultural context, the familial context, constitutional vulnerability, and adverse life events have been suggested as potential risk factors (Striegel-Moore, 1993). Even though the theoretical models differ in the emphasis placed on given risk domains, there is considerable agreement that the etiology of eating disorders is multifactorial (Striegel-Moore & Cachelin, 1999). Risk for eating problems derives from a combination of specific risk factors unique to eating disorders and general risk factors that are associated with other mental health disorders. Exposure

to these risk factors occurs in diverse settings such as family, school, and peer group and the salience or potency of risk factors derives in part from the point in development at which they occur. Risk is also cumulative in that the greater the number of risk factors experienced, the greater the chance a girl or woman will develop an eating disorder (Striegel-Moore & Steiner-Adair, 1998).

Until recently, disordered eating was thought to be rare among girls and/or women of color. As a consequence, only a few studies have included minority populations (Striegel-Moore, Schreiber, Lo, Crawford, Obarzanek, & Rodin, 2000). However, girls and women of color have higher rates of eating disorders than has previously been described or documented in the research literature (Crago, Shisslak, & Estes, 1996; Striegel-Moore & Smolak, 1996). A major problem with these limited studies is that the results are oftentimes inconsistent and/or contradictory.

For example, some of the research that has examined Latina and White differences in eating disorders has been equivocal, with several studies finding similar incidence rates (Jane, Hunter, & Lozzi, 1999). Other researchers have found that Latinas are both heavier and less concerned with their weight than Caucasian females (Harris & Koehler, 1992), while Fitzgibbon et al. (1998) and Smith and Krejci (1991) reported that certain eating disorder symptoms were more severe in their sample of Hispanic girls and women compared to White participants. In a study of college females, low self-esteem was associated with eating disordered behaviors and attitudes among Black and White students (Akan & Grilo, 1995). In another study, Black female college students were less likely than White female students to feel depressed after a binge, reported less family emphasis on food and weight, and felt that a five pound weight gain would not make a

difference in their attractiveness (Gray et al., 1987). Abrams et al. (1993) found that Black women who were less enculturated into the Black culture scored higher on dieting and weight concern measures, while Akan and Grilo (1995) found no association between enculturation and eating attitudes and behaviors. Inconsistencies in eating disorder research studies with women of color abound and may be due in part to the inherent diversity with respect to sociocultural background and acculturation and assimilation within ethnic categories (French, Story, Neumark-Sztainer, Downes, Resnick, & Blum, 1997).

Research on the etiology of eating disorders is not as advanced as research on other mental health disorders such as depression. In addition to which, factors that contribute to resilience against eating disorders have not yet been investigated in detail (Striegel-Moore & Cachelin, 1999). One possible model for explaining resilience may be the Stone Center's Relational Model of female psychological development. Qualitatively, researchers have examined female development through the lens of the Relational Model and have concluded that mutually empathic relationships are essential for a sense of overall well-being and for promoting healthy growth and development in girls and women (Surrey, 1991a). However, empirical examination of this model has been limited by a lack of validated instruments designed to measure the specific constructs of the Relational Model (Liang et al., 2000).

The only published measure that explicitly reflects the constructs of the Relational Model of female development is the Mutual Psychological Development Questionnaire (MPDQ; Genero et al., 1992). The MPDQ is an assessment based specifically on impressions during verbal interactions with a spouse, partner, and/or friend. This

instrument assesses the unitary concept of perceived mutuality within dyadic relationships, which is only one aspect of the Relational Model (Liang et al., 2000). A new measure, the Relational Health Indices, has been developed and validated to examine the growth-fostering qualities of peer, mentor, and community relationships based on the three types of relational constructs (authenticity, engagement, and empowerment/zest) which comprise the Stone Center's Relational Model of female development (Liang et al., 2000).

Researchers have stated that peer, mentor, and community relationships are important factors in the psychological and physical well-being of Black and Latina adolescents (e.g., Falicov, 1998; Gloria & Rodriguez, 2000; Leadbeater & Way, 1996; Way & Chen, 2000). However, very little empirical research has been done which looks at the possible relationship of disordered eating in older female adolescents of color and their specific relationship connections. This type of research may assist in the future development of successful programs for eating disorder prevention, education, and intervention on college campuses.

Purpose of the Study

This research was undertaken to determine the relationships among White, Black, and Latina college women's peer, mentor, and community relationships and their disordered eating attitudes and behaviors. This study empirically used the theoretical constructs of the Stone Center's Relational Model of female psychological development. As noted, such an application cannot be found to date in the research literature.

One of the primary purposes of this research was to empirically examine eating disorders in a diverse female college population. It has been recognized that the college

years are an especially vulnerable time for young women in our sociocultural environment to develop disordered eating attitudes and/or behaviors (Martz & Bazzini, 1999). As American college campuses become more racially diverse, it is important to study the dynamics of disordered eating in varied female college populations. Eating disorders in Black female college students have been examined in a limited number of studies with inconsistent results. Research on Latina college women and disordered eating is almost nonexistent. Therefore, this research seeks to expand the empirical knowledge base of college women of color and disordered eating attitudes and behaviors.

Another purpose of this research is to examine specific types of relationships of college women. Chatoor (1999) stated that developmentally the older adolescent female needs to begin loosening the ties with her parents and increase her relational involvement with others. College women typically develop important relationships with peers, mentors, and various types of communities. The value of social support to both physical and psychological health has been well documented (Hobfoll, 1986), but the possible relationship of eating problems to the peer, mentor, and community relationships of a diverse population of female college students has not been studied. There is a possibility that these types of relationships, which are integral to the constructs of the Stone Center's Relational Model, may prove to be a factor of resilience for female college students vulnerable to the struggles of disordered eating.

Rationale for the Approach

This research is unique in its focus on Relational Health as a potential factor of resilience in college women's struggle with the behaviors and attitudes of disordered eating. Whereas existing measures of social support have tended to assess the structure,

quantity, and general functions of support, Relational Health represents more nuanced aspects of a broad range of interpersonal connections that are believed to be fundamental to female psychological development (Liang et al., 1998). In addition, almost all of the previous studies on girls and women and relational theory have been qualitative in design and rarely look at the dynamics of disordered eating.

This research also sought to expand the knowledge base on disordered eating by directly addressing the role that peer, mentor, and community relationships of a diverse female college population have on the continuum of eating problems. The recognition of the Relational Health of White, Black, and Latina college women as a variable in the complex structures of disordered eating may provide insights for university mental health providers and college administrators as they attempt to make inroads within this nationwide female student health epidemic.

In this study, Relational Health was assessed using the three scales of the Relational Health Indices (RHI). Liang et al. (2000) developed these scales in response to research that validates that among growth-fostering relationships, close ties with peers and adult mentors and belonging to a supportive community are three of the most significant types of connections in later adolescence and young adulthood (Gilligan et al., 1990; Hagerty et al., 1996; Leadbeater & Way, 1996). The RHI was developed for a female college student population.

Disordered eating was assessed using the Eating Attitudes Test-26 (EAT-26) (Garner, Olmstead, Bohr, & Garfinkel, 1982), a 26-item self-report measure of eating attitudes and pathology. This instrument has been useful in identifying eating disturbances which interfere with normal psychosocial functioning in non-clinical

samples in high risk populations such as female college students (Alexander, 1998; Button & Whitehouse, 1981; Gross, Rosen, Leitenberg, & Willmuth, 1986; Heesacker & Neimeyer, 1990; Mazzeo, 1999; Thompson & Schwartz, 1982).

Research Questions

The following research questions were examined in this study:

1. What is the relationship between peer relationships and disordered eating?
2. Does the relationship between peer relationships and disordered eating differ for White, Black, and Latina female college students?
3. What is the relationship between mentor relationships and disordered eating?
4. Does the relationship between mentor relationships and disordered eating differ for White, Black, and Latina female college students?
5. What is the relationship between community relationships and disordered eating?
6. Does the relationship between community relationships and disordered eating differ for White, Black, and Latina female college students?
7. What is the relationship among White, Black, and Latina college women's disordered eating?
8. What is the relationship among White, Black, and Latina college women's peer relationships?
9. What is the relationship among White, Black, and Latina college women's mentor relationships?
10. What is the relationship among White, Black, and Latina college women's community relationships?

Definition of Terms

The following list of terms are operationally defined according to their meanings in this study.

Anorexia nervosa is an eating disorder that is often life-endangering and is characterized by a distorted body image, excessively low weight, and a relentless pursuit of thinness (Lemberg, 1999).

Authenticity is the process of acquiring knowledge of self and others and feeling free to be genuine in the context of the relationship (Liang et al., 2000).

Binge eating disorder is an eating disorder characterized by recurrent episodes of binge eating in the absence of regular use of inappropriate compensatory behaviors such as vomiting, excessive exercise, and laxative abuse (Lemberg, 1999).

Black is the term used to refer to girls and women of both African American and Caribbean American heritage (Comas-Diaz & Greene, 1994).

Body image refers to feelings and attitudes toward one's own body (Hsu & Sobkiewicz, 1991).

Bulimia nervosa is an eating disorder characterized by recurrent episodes of binge eating accompanied by inappropriate compensatory behavior in order to prevent weight gain such as self-induced vomiting and/or laxative abuse (Lemberg, 1999).

Connection is an interaction between two or more people that is mutually empathic and mutually empowering (Miller & Stiver, 1997).

Continuum of disordered eating places unrestrained eating (asymptomatic group) at one end of the continuum, clinical eating disorders (eating disordered group) at the

other end of the continuum, and the milder forms of disturbed eating (symptomatic group) at intermediate points (Tylka & Subich, 1999).

Disconnections are the experiences of feeling cut off from those with whom we share a relationship. This cutting off is experienced as the pain of not being understood and of not understanding the other person. It is an encounter that works against mutual empathy and mutual empowerment (Miller & Stiver, 1997).

Empathy is the capacity that exists in all people to feel and think something similar to the feelings and thoughts of another person (Miller & Stiver, 1997).

Engagement is a relational quality that is defined by perceived mutual involvement, commitment, and attunement to the relationship (Liang et al., 2000).

Latina is the term used to refer to girls and women of Mexican, Caribbean, and South and Central American heritage (Gloria & Rodriguez, 2000).

Mentor is an adult person other than a primary caretaker, peer, or romantic partner who is available for support and guidance and is a positive role model (Leadbeater & Way, 1996).

Mutual empathy is a joining together based on the authentic thoughts and feelings of all the participants in a relationship. It is different from one-way empathy and out of it flows mutual empowerment (Miller & Stiver, 1997).

Mutual empowerment is composed of five essential components: zest, action, knowledge, worth, and a desire for more connection (Miller & Stiver, 1997).

Mutuality is a way of relating, a shared experience in which all of the people involved are participating as fully as possible (Miller & Stiver, 1997).

Relational Model/Theory is a paradigm for the assessment of women's psychological development and well-being. The goal is not for the individual to grow and mature out of relationships, but to grow into them. Growth-fostering relationships are both the source and the goal of women's development (Miller & Stiver, 1997).

Relationship is the set of interpersonal interactions that occur over a length of time. A relationship is usually a mixture of both connections and disconnections (Miller & Stiver, 1997).

Subclinical eating disorders are disordered eating behaviors that do not meet diagnostic criteria for a clinical eating disorder, yet are problematic for the individual and may be a precursor to a more serious eating disorder at a later time (Lemberg, 1999).

Zest/empowerment is the experience of feeling personally strengthened, encouraged, and inspired to take action (Liang et al., 2000).

Organization of the Remainder of the Study

The remainder of this study is organized into four chapters. Chapter 2 presents a review and analysis of relevant, related literature. Chapter 3 presents the research methodology including a description of the population and sample, sampling procedures, research hypotheses, and instrumentation. Data collection procedures, data analyses, and the results of the study are presented in Chapter 4. Chapter 5 concludes the study with a summary of the dissertation research, discussion of results, limitations, implications, and recommendations for future research.

CHAPTER 2 REVIEW OF THE LITERATURE

Introduction

The purpose of this chapter is to summarize the professional literature relevant to this study of relational health and disordered eating in Black, Latina, and White female college students. This literature review includes the following topics: (a) traditional models of human psychological development and the Wellesley College Stone Center's Relational Model of female psychological development and well-being; (b) risk factors for disordered eating in college women which include sociocultural context, college adjustment, and race and ethnicity; and (c) protective factors against disordered eating in college women which include peer relationships, mentor relationships, and community relationships.

Theoretical Model

Many theorists of human development (e.g., Blos, 1962; Erickson, 1968; Levinson, 1978) have proposed that the processes of individuating oneself from others define various stages of adolescent development. From this perspective, development of a sense of self is believed to be attained through a series of crises by which an individual adolescent accomplishes independence and autonomy via separation from others (Johnson, Roberts, & Worell, 1999).

Blos (1962), a psychoanalytic theorist of adolescent development, was an ardent believer in the necessity of separation and individuation. He proposed that the developmental stage of adolescence could be considered “the second individuation process,” whereas the first process of individuation occurs towards the third year of life with the attainment of object constancy. Blos (1967) further suggested that failure to individuate fully in adolescence leads to the probable consequences of deviant development or psychopathology.

In Erikson’s (1963) developmental schema, following the initial stage of “trust versus distrust” in the first year of life, every subsequent stage until young adulthood involves some variation of separation from others. It is not until the early 20’s when an individual reaches the stage of “intimacy versus isolation” that close relationships with others are emphasized (Erikson, 1968).

Levinson (1978) considered the ages from 17 to 22 as the stage of “early adult transition.” During this stage, he proposed that separation was the primary theme especially separation from adolescent groups and family of origin. Levinson (1978) believed that this stage was characterized by an entrance into new, more autonomous roles with a significant increase in psychological distance from the family.

Such traditional theories of lifespan development have become influential in Western culture because they represent prescriptions for what ‘should’ happen in the process of human development (Miller, 1984). From this perspective, according to McGoldrick (1989), the reality of continuing interpersonal connection is often lost or relegated to the background. Miller (1991) contended that the prevalent definition of a

mature autonomous “self” is not congruent with female experience which is more aptly described by a mutually interacting self, informed by mutual empathic experience.

During the last three decades of the twentieth century, writers on the psychology of women have questioned the priority of valuing individuation and autonomy over relational connection in female psychological development and well-being (Gilligan, 1982; Jordan et al., 1991; Miller, 1976). Substantial research has validated the fact that women are healthier both physically and psychologically when they develop in the context of relationships from infancy through later adulthood and that this connectedness to others helps not hinders the development of a solid sense of self (Ainsworth, 1989; Beeber, 1998; Buehler & Legg, 1993; Burnett & Demnar, 1996; Evans & Wertheim, 1998; Kenny, 1991; Lu & Argyle, 1992; Rhodes & Kroger, 1992).

Chodorow (1978) stated that the most important feature of early infantile development is that it occurs in relation to another person or persons, usually the mother. She proposed that a female affiliative or relational self emerges from a parenting structure in which mothers interact differently with their sons and daughters. Daughters are treated as maternal projections and never fully separate from her, and thereby come to define themselves as connected to or continuous with others with more permeable ego boundaries. Boys, on the other hand, in order to develop a sense of male gender identity are treated as separate from their mothers and come to identify themselves as differentiated from others with more rigid ego boundaries.

This sense of developing ‘within’ rather than ‘away from’ relationships with others seems to follow females as they progress through the evolving stages of infant, child, adolescent, and adult development (Ainsworth, 1989; Gilligan, 1982; Gilligan et

al., 1991; Kenny, 1987, 1991; Miller, 1991). This construct of connection and the importance of social support and relationships in girls' and women's lives have been studied extensively from various perspectives (e.g., Boyce, Harris, Silove, Morgan, Wilhelm, Hadzi-Pavlovic, 1998; Buehler & Legg, 1993; Fuhrer et al., 1999; Harris, Blum, & Resnick, 1991; Warren, 1997).

Boyce et al. (1998) examined the mediating effect of social support in the development of depression among 193 high-risk, low socioeconomic females between the ages of 16 and 50 with dependent children. Major depression was associated with perceptions of low parental care in childhood, low care with current partner, and an unsatisfactory social support network. Buehler and Legg (1993) examined the effects of social support on the relationship between stressful life change and the psychological well-being of 144 separated women aged 20 to 45 with dependent children. The relationship between life change and psychological well-being was positively associated with various aspects of social support. In a large cohort of 1,877 middle-aged female British Civil Servants, Fuhrer et al. (1999) found that regardless of the source of social support, social relationships within and outside the workplace appeared to be negatively associated with psychological distress. In a study of 36,284 Minnesota adolescents in the 7th through 12th grades, girls were found to express more emotional distress than boys when feeling disconnected in intimate relationships. Those girls who experienced lower levels of connectedness with others evidenced higher levels of emotional stress, negative body image, suicide attempts, and pregnancy risks (Harris et al., 1991). Warren (1997) examined relationships between depression, stressful life events, social support, and self esteem in 100 middle class African American women aged 20 to 35. Statistical analysis

revealed a positive relationship between depression and stressful life events and a negative relationship between depression and social support.

Research findings from such studies have indicated that the quality and nature of women's relationships are probably more meaningful than their specific quantity or structure (Liang et al., 2000). Some large etiological studies have found significance for the value of network size and health for men, but not for women (House, Robbins, & Metzner, 1982; Schoenbach, Kaplan, Fredman, & Kleinbaum, 1986). Women's physical and mental health tends to benefit most from relationships with female friends and relatives who are nurturing and providers of emotional support (Berkman & Syme, 1979; Wheeler, Reis, & Nzlek, 1983). In addition, Wheeler et al. (1983) found that high numbers of social contacts do not ward off loneliness. It is only when these relationships involve emotional intimacy and disclosure that women are able to combat feelings of loneliness and alienation. VanderVoort (1999) examined 280 male and female undergraduate students and found that the women in the study reported significantly more satisfaction with their social support systems and less isolation and depression. For these college women, the emotional support given by their various relationships met their emotional needs by enabling them to feel valued as well as process or work through their emotional difficulties (Vandervoort, 1999).

Those relationships that are intimate and mutual can facilitate self-disclosure, emotional resiliency, coping strategies, and additional social support for girls and women (Genero, Miller, Surrey, & Baldwin, 1992; Jordan, 1986; Miller & Stiver, 1997). From this basic construct, researchers at the Wellesley College Stone Center have developed the Relational Model as a theoretical paradigm for the assessment of women's

psychological development and well-being (Liang et al., 2000). Relational Model theorists have focused on the “self-in-relation” and consider their theory to be a relational approach to the understanding of female psychological development and the importance of relationships in the lives of girls and women (Miller & Stiver, 1997). They have identified three major growth-fostering characteristics of relationships, which have been supported by previous research. They are mutual engagement, authenticity, and empowerment or zest (Liang et al., 2000).

Mutual engagement is defined as perceived mutual involvement, commitment, and attunement to the relationship (Surrey, 1991b). Mutual engagement may have a beneficial impact on individuals as well as relationships as indicated in studies on empathy and closeness (Liang et al., 2000). These qualities mediate stress and depression and are associated with self-actualization, self-esteem, low interpersonal distress, and relationship satisfaction (Beeber, 1998; Burnett & Demnar, 1996; Gawronski & Privette, 1997; Schreurs & Buunk, 1996; Sheffield, Carey, Patenaude, & Lambert, 1995). Authenticity is not a static state that is achieved at a discrete moment in time, but rather a girl's or woman's ongoing ability to represent herself in a relationship with increasing truth and fullness and thereby acquire knowledge of self and other (Miller & Stiver, 1997). Research on authentic self-disclosure and openness appears to be related to being liked, increased liking of others, and motivation in relationships (Collins & Miller, 1994; Kay & Christophel, 1995). Empowerment or zest, the experience of feeling personally strengthened, encouraged, and thereby motivated to take action (Liang et al., 2000), has been shown to have a direct impact on positive affect, meaningful activity, and creativity (Hall & Nelson, 1996; Spreitzer, 1995).

The Relational Model was initially conceptualized by Surrey (1985) as the mutually interacting self or the "self-in-relation." She posited a theory of female psychological development that rejected the notion that connectedness and differentiation were dichotomous and viewed the overall maturation process as the development of a complex, defined self within a structure of connected relationships. Surrey (1985) contended that a young woman's self-esteem was dependent on her capacity to develop relational competence, which included the capacity to experience and communicate accurate empathy. The traditional definition of empathy is a temporary blurring of ego boundaries which allows an individual to experience the affect of another followed by a distancing then return to an objective position (Nelson, 1996). Jordan (1991), another Stone Center theorist, contended that this perspective on empathy inaccurately perpetuates seeing the self as either distinctly autonomous or "merged and imbedded." Jordan (1991) proposed that it is possible for an individual to feel connected to another or be affectively joined while at the same time appreciate and be fully aware of her own separateness. She also contended that the skillful use of empathy requires well-defined ego boundaries.

Relational competence as defined by the Relational Model is the ability to attend to the affect and experience of another individual and then respond in an appropriate manner that compromises neither that individual self nor another (Nelson, 1996). Mutuality, authenticity, and empowerment or zest are the key components of this relational skill (Liang et al., 2000). Relational competence leads to mutual empowerment, a state in which each person can receive and then respond to the feelings and thoughts of the other, each is able to enlarge both her own and another person's

feelings and thoughts, and simultaneously each person enlarges the relationship (Miller & Stiver, 1997). Psychological health is therefore the outgrowth of connection with others while psychological distress develops in response to repeated and chronic patterns of disconnection (Miller, 1988). According to the principles of the Relational Model, the goal of healthy psychological development for girls and women is attained via the increasing ability to build and enlarge mutually enhancing relationships in which each individual can feel an increased sense of well-being through being in touch with others and finding ways to act on individual thoughts and feelings (Surrey, 1985).

Pollack and Gilligan (1982), in a study using Thematic Apperception Test (TAT) cards, found that male subjects reported seeing more violent images when people were physically brought closer together in TAT pictures. Women, on the other hand, related more violent stories when people were set further apart. Pollack and Gilligan (1982) concluded that closeness and relatedness form the context for girls' and women's psychological development and exclusion and isolation are purposefully avoided.

In this research study, peer, mentor, and community relationships were hypothesized as potential protective factors in Black, Latina, and White college women's struggles with disordered eating. Among growth-fostering relationships, close ties with peers, mentors, and belonging to a community are three of the most significant types of connections for young adults (Liang et al., 2000). Rosen & Neumark-Sztainer (1998) reviewed options for primary prevention of eating disturbances and stated that almost nothing is known or written about the protective factors that may increase resilience to the development of disordered eating. Protective factors are conceptualized as characteristics in an individual's world that mitigate against the development of

behavioral and psychological problems despite the existence of risk factors (Rutter, 1979). For this population, relevant risk factors for the problems associated with disordered eating are the sociocultural environment (Striegel-Moore, 1993) and the stresses involved with adjusting to and successfully navigating the challenges of college life (Martz & Bazzini, 1999). Women of color face additional hardships in college adjustment especially in predominantly White university settings (Gloria & Rodriguez, 2000), therefore race and ethnicity was also considered a relevant risk factor.

Risk Factors for Disordered Eating in College Women

The attitudes and behaviors of the continuum of disordered eating generally develop in adolescence and increase in prevalence as young women transition through their college years (Alexander, 1998). Bulimia nervosa is virtually unheard of prior to adolescence and the vast majority of women clinically diagnosed with bulimia nervosa have symptom onset before the age of 25. Similarly, in clinical samples the modal age of onset of binge eating is 18 and it is rarely seen in children. Anorexia nervosa does occur in prepubertal children but the incidence increases dramatically after puberty, with the majority of cases beginning before the age of 25 (Woodside & Garfinkel, 1992).

Researchers have estimated that 3% to 19% of college women have bulimia, 1% to 2% have anorexia, and as many as 61% display subclinical eating disordered attitudes and behaviors such as extreme body consciousness, chronic dieting, overexercising, bingeing without purging, and/or purging without bingeing (Mintz & Betz, 1988). These unhealthy symptoms may actually be considered relatively normative among undergraduate women (Mazzeo, 1999). Striegel-Moore and Cachelin (1999) stated that the etiology of disordered eating is multifactorial and varies for each individual girl

and/or young woman. If inroads are to be made in the area of primary prevention, it is important to understand the risk variables for disordered eating in the female college population.

Sociocultural Environment

Concerns with food and weight have become such a major sociocultural preoccupation for girls and women in Western culture that it is almost impossible to grow up female today without ever feeling fat, worrying about weight, and developing ambivalent feelings towards food (Friedman, 1998). At a very young age, girls are socialized to hate obesity and to accept a cultural standard of thinness that is close to or below the minimum required weight for reproduction (Wooley & Wooley, 1982). Adolescent girls receive the message to be thin no matter what the costs, to deny their needs and appetites to achieve this goal, and to deny their selves and their bodies to please others (Mirkin, 1990).

Collins (1991) examined Black and White elementary school girls and found that a majority of the subjects expressed a bias toward thinner child and adult figures and 42% preferred body figures that were different and thinner than their own perceived body shape. This finding was true across all age, weight, and ethnic groups. Collins (1991) concluded that the onset of disparate figure perceptions and expectations regarding thinness among females might be evident as young as 6 or 7 years of age.

Puberty and adolescence appear to be critical developmental stages for the evolving preoccupation with body shape and weight (Surrey, 1991). Adolescent girls' growth spurt, which involves the normal tendency to gain weight and increase their body fat, seems to be an important factor in this growing preoccupation (Wooley & Wooley,

1982). Among many young women in a Western culture that values thinness, weight gain and the personal experience of 'getting fatter' seem to initiate psychological disturbances in body image and attempts toward weight reduction (Surrey, 1991). Although girls tend to naturally gain weight and body fat during puberty, Western culture encourages girls to strive for an extremely thin body ideal and then judges them harshly according to this unrealistic standard (Steiner-Adair, 1990).

Clausen (1975) stated that there is a correlation between female adolescent body build and actual positive and negative evaluations, prestige, and success in relationships. While boys were given social approval for academic success and achievement, girls were praised for their physical appearance and more specifically for being slim (Clausen, 1975). Rosenbaum (1993), in a study of adolescent girls, found all subjects preferred small, unobtrusive body parts with the exception of a preference for large breasts. In addition to which, given three wishes about what they would change about their bodies, the girls consistently chose these priorities: (a) to lose weight and keep it off, (b) blond hair and blue eyes, (c) a clear complexion and a perfect figure (Rosenbaum, 1993).

Robinson, Killen, Litt, and Hammer (1996) surveyed 939 6th and 7th grade girls aged 10 to 14 years old in order to assess body dissatisfaction. Latina girls reported significantly greater body dissatisfaction than White girls even among the leanest 25% of the subjects. Striegel-Moore, Schreiber, Pike, and Wilfley (1995) examined 311 Black and 302 White girls aged 9 to 20 years old for racial and food intake differences looking at the dynamic of the drive for thinness, a variable linked to the etiology of eating disorders. Black girls in the study reported significantly greater drive for thinness than White girls. In an *Essence* magazine study of 600 randomly selected Black females aged

17-62 years old, results showed that surveyed subjects had adopted attitudes toward body image, weight, and eating, and suffered from levels of depression that were comparable to their White counterparts. These factors also served to increase their risk for eating disorders (Pumariega, Gustavson, Gustavson, & Motes, 1994). Root (1990) states that racial/cultural context may afford protection from disordered eating to an ethnic group, but it does not necessarily protect individuals who are subject to the standards of the dominant Western culture. Levels of acculturation and assimilation are also important variables to be considered in the relationship of disordered eating and women of color.

Thompson (1992) labeled our current sociocultural environment as a 'culture of thinness,' an environment which glorifies thinness as the ticket to happiness and success and denigrates overweight bodies by linking them to such negative characteristics as laziness, ugliness, and failure. Antifat prejudice is so acceptable in our society that Crandall (1991) stated that it is a better element for studying the dynamics of discrimination and prejudice than is the study of racism or sexism since the latter are influenced by social desirability factors.

Images of supposedly attractive women such as beauty pageant winners and *Playboy* centerfolds have become progressively thinner since the 1960's (Garner, Garfinkel, Schwartz, & Thompson, 1980; Wiseman, Gray, Mosimann, & Ahrens, 1992). This contemporary sociocultural phenomenon of thinner and thinner female bodies has also been prevalent in female fashion models employed by leading modeling agencies (Morris, Cooper, & Cooper, 1989).

American women report a preoccupation with body weight that begins before puberty and intensifies in adolescence and young adulthood (Brumberg, 1988). In a 1984

Glamour magazine survey of 33,000 women, when asked to choose among potential sources of happiness, the majority of respondents chose weight loss over success at work or in interpersonal relationships. Eighty percent of these surveyed women also believed that they had to be thin in order to attract men (Brumberg, 1988). This 'perfect female weight' represented by media image ideals has progressively decreased to that of the thinnest 5-10% of American women and consequently, 90-95% of American women feel as if they'll never be able to 'measure up' physically (Seid, 1994).

Individuals who adhere to popular stereotypes of female beauty are more likely to exhibit thoughts and behaviors associated with disordered eating (Hesse-Biber, 1991; Mintz & Betz, 1988). Garfinkel and Garner (1982) found that women who were dancers and fashion models and therefore experienced a heightened pressure to conform to a thin body shape were at greater risk for developing eating disorders. Heinberg & Thompson (1995) determined that direct exposure to media-communicated images of thin, attractive women via print or film materials produced an immediate increase in women's body dissatisfaction and dysphoric mood.

Steiner-Adair (1990) interviewed 32 White girls aged 14 to 18 years old in order to examine their perceptions of cultural values and cultural and individual images of women. Three weeks after the interviews were finished, girls completed the Eating Attitudes Test (EAT), which assessed eating disordered behavior. Interpretation of the interviews revealed two different patterns of responses: the wise woman pattern and the superwoman pattern. Sixty percent of the girls fit into the wise woman response pattern, indicating a personal awareness of the cultural expectations and values of a woman's autonomy and independent achievement in career and appearance, yet differentiating

their own individual ideal from this societal image. Forty percent of the girls fell into the superwoman response pattern, identifying with the independent and autonomous superwoman as the societal ideal as well as their own. All of the wise women scored in the noneating disorder range of the EAT in contrast to the 11 of 12 superwomen who scored in the eating disorder range. Steiner-Adair (1990) concluded that those girls who uncritically accept a societal image that conflicts with their own female developmental history of connection are at a greater risk for developing eating disorders.

In another research study looking at body image, Schwartz and Thompson (1982) examined the effects of the thin sociocultural ideal on "normal" college women and found that a high percentage of these young women engaged in disordered eating behaviors including both binge eating and purging. They concluded that there is a large percentage of functioning female college students who engage in eating disordered behaviors in order to stay thin. Although only a minority of adolescent girls develops clinical eating disorders, a large majority of these young women diet and suffer from subclinical eating concerns, body dissatisfaction, and what has been called a "normative discontent" (Rodin, Silberstein, Striegel-Moore, 1985).

The prevalence of the continuum of disordered eating attitudes and behaviors in a diverse population of female college students across the nation has been documented in various research studies (e.g., Abrams et al., 1993; Akan & Grilo, 1995; Alexander, 1998; Drewnowski et al., 1988; Gray et al., 1987; Hesse-Biber et al., 1999; Pyle et al., 1991). The exact numbers of affected college females varies widely but Riley (1991) stated that eating disorders are among the most rapidly increasing diseases of our time. In response to this pervasive problem, Striegel-Moore & Cachelin (1999) stated that intervention

studies are clearly needed that are based on models of risk and resilience in the arena of disordered eating. Within the current body of eating disorder research, the sociocultural environment as a possible risk factor is well documented. In contrast, the variables of adjustment to college for young women have not been empirically explored as potential risk factors for disordered eating.

Adjustment to College

Attending college away from home for the first time entails a major transition for late adolescents which is fraught with a great deal of stress (Wintre & Yaffe, 2000). Students envision a new life free of parental control, filled with interesting and novel experiences, with new people to meet and stimulating academic activities (Pancer, Hunsberger, Pratt, & Alisat, 2000). The reality of students' experiences at a college or university is actually harsher and more stressful than many late adolescents ever anticipate (Compas, Wagner, Slavin, & Vannatta, 1986).

Students need to adjust to the new responsibilities of young adult independence and cope with an environment that is very different from the one they have been used to at home during their high school years (Pancer et al., 2000). Usually students are moving away from home for the first time and are therefore cut off from their existing support network made up of extended family and close friends (Rice, 1992). In addition, they are forced to perform many tasks that were formerly done by their parents such as doing their own laundry and managing their finances (Koplik & Devito, 1986). On top of all of these challenges, their collegiate academic requirements are usually more difficult than the work they did in high school (Pancer et al., 2000).

Most of the work in establishing an independent identity for young adults is completed during college rather than during high school. The majority of college students spend at least part of their college years in a state of moratorium. During this period of moratorium, a student actively explores options for values and beliefs concerning politics, religion, career, etc. and women also consider family and gender roles. This developmental stage is both exciting and challenging but can also be psychologically stressful for most college students (Smolak & Levine, 1996).

Chickering's (1969) model of college students' psychosocial development has been widely researched and is a structured way of conceptualizing this developmental period. It was recently updated (Chickering & Reisser, 1993) and includes the following seven vectors: (a) developing competence, (b) managing emotions, (c) moving through autonomy toward interdependence, (d) developing mature interpersonal relationships, (e) establishing identity, (e) developing purpose, and (f) developing integrity. This model defines the development of mature interpersonal relationships via tolerance and appreciation of individual differences and a capacity for intimacy. These dynamics are similar to the growth-fostering characteristic of mutual engagement within the Relational Model. Chickering's fifth dimension of establishing identity includes the need to find comfort with body and appearance and self-acceptance and self-esteem (Chickering & Reisser, 1993). This developmental task directly relates to college women's struggles with their sociocultural environment and the continuum of disordered eating. Chickering and Reisser's (1993) updated version of student developmental theory recognizes the importance of students' experiences with relationships in the formation of their core sense of self.

Although some students adjust fairly well to these major developmental challenges, others are overwhelmed and are unable to make use of positive coping skills. Many students experience physical and/or emotional problems related to the struggles of college adjustment (Wintre & Yaffe, 2000). Striegel-Moore and Steiner-Adair (1998) stated that adolescent young women in response to a wide range of difficulties and stressors in life might often use disordered eating as a coping mechanism. The multiple challenges of adjusting to college life and feeling successful in the university environment would be considered a major life stressor for many young adult women and therefore could be a potential risk factor for disordered eating.

Certain facets of the college sociocultural environment may also contribute to college females' vulnerability to a continuum of attitudes and behaviors related to disordered eating (Martz & Bazzini, 1999). Hesse-Biber (1996) stated that there are several reasons why the college environment may be a breeding ground for weight obsession and eating problems. College provides a "semi-closed" environment that tends to amplify sociocultural messages. Disordered eating is often spread through imitation, competition, and/or solidarity, sociocultural experiences, which are commonplace on university campuses. In addition, weight gained during college is especially detrimental in a climate primed to value thinness and often begins the vicious cycle of disordered eating. Stress leads to overeating, which leads to weight gain, which leads to restricted eating, binge/purge cycles, and/or overexercising, which may lead to more stress if these compensatory behaviors fail to work (Hesse-Biber, 1996).

Because college is a time in which dating serves an important social function, the constant pressure on young women to be attractive may be particularly salient during

these years (Martz & Bazzini, 1999). Low body weight has become critical in defining attractiveness for these young women and their appearance is an important determinant of attracting and dating young men (Rodin et al., 1985). Therefore, this period of a young woman's life may present stress-related pressures to look "perfect" in order to appeal to and attract friends and potential romantic partners (Martz & Bazzini, 1999).

Epidemiology suggests an increased incidence of disordered eating since the 1960's for women in their 20's and 30's. Many of the struggles associated with the entire arena of problem eating for these women oftentimes began in their college years (Pawluck & Gorey, 1998).

In summary, the transition involved in the academic and social adjustment to college for residential students is oftentimes very challenging. Many students are unable to make use of positive coping mechanisms and as a result end up dealing with physical and/or psychological problems. This transition is especially difficult for young women as they face on-going pressures to be attractive in order to attract both friends and dating partners. Many young college women become involved in the continuum of disordered eating as they strive for the "perfect" body. Adjustment to college life on predominantly White university campuses may be even more difficult for minority women than for White female students as they face additional challenges associated with their race and/or ethnicity.

Race and Ethnicity

The number of both Black and Latina female college students enrolling in colleges is growing and most of these young women attend predominantly White institutions of higher education. Their minority status in these settings usually translates

into different academic and personal experiences than those encountered by their White female student counterparts (Gloria & Rodriguez, 2000; Schwitzer, Griffin, Ancis, & Thomas, 1999). Although all students must contend with academic stresses and adjustment difficulties, coping with the challenges of college life is generally more difficult for racial/ethnic minority students than for White students (Gloria & Rodriguez, 2000). Ponterotto (1990) stated that many Black and Latina students often feel unwelcomed and unappreciated on predominantly White university campuses. There is little written in the literature specifically on Black and Latina female college student adjustment, therefore the majority of the following studies are based on samples of both male and female students of color.

Using qualitative research methods, Schwitzer et al. (1999) described a model that identified four key features that tend to constitute African American students' social adjustment to college experiences. Focus group participants in this study were 22 traditionally aged 4th year seniors, a majority of which were female, at a predominantly White university. The first two features in the model relate to aspects of adjustment to the institutional climate as a whole and are labeled "sense of underrepresentedness" and "direct perceptions of racism." The next two features refer to specific influences on academic relationships with faculty. In this study, respondents reported feeling "unsupported" and "different" and stated that the transition to the institution's social climate had been "hard," "difficult," "a struggle," or "unhappy." They also felt "isolated," "frustrated," "overlooked," or "misunderstood" by others on campus because of their race.

This four-feature descriptive model for Black students described by Schwitzer et al. (1999) is consistent with the literature on other models of successful college matriculation and persistence. These models focus on two central tasks involved in college adjustment which are establishing successful interpersonal relationships in the campus environment also known as social adjustment and effectively interacting with faculty in and outside the classroom which is a component of academic adjustment (Baker, McNeil, & Siryk, 1985; Baker & Siryk, 1984).

Gossett, Cuyjet, and Cockriel (1998) reported that 324 African American students attending four midwestern universities felt marginalized in their campus environment. This marginalization occurred in diverse situations involving administrative staff, academic advising, classroom activities, faculty interactions, peer interactions, and student services. The college environment, particularly when perceived as discriminatory, hostile, alienating, or isolating, can be a major factor in the impediment of African American students' participation and persistence in higher education (Allen, 1992).

Cervantes (1988) found that many African American and Latino students felt a need to assimilate into the White university culture in order to be accepted. 'Blending in' required them to hide and/or disown their ethnic background, which resulted in feelings of isolation, cultural alienation, and an overall sense of being unwelcomed in higher education because of their cultural, racial, or ethnic differences.

Sedlacek's (1999) meta-analysis of twenty years of research on Black students on White college campuses found that racism, both individual and institutional, remains a major problem for Black students across the country. Institutional racism involves

university policies and procedures, either formal or informal, which result in negative outcomes for Black students. This type of racism is often more of a problem for Black students than is racism expressed and/or acted out by individuals (Sedlacek, 1999). A common example of institutional racism is the separate African American and White fraternity and sorority systems in which African American organizations are stereotyped and must compete with the larger White Greek system for university funding (Schwitzer et al., 1999).

Smedley, Myers, and Harrell's (1993) study, which included a diverse sample of Hispanic and Latino students, reported that students on predominantly White college campuses faced stressors associated with their minority status. They exhibited considerable psychological sensitivity to the campus social environment including interpersonal tensions with White students and faculty and actual or perceived experiences of racism and discrimination. Among Latino sophomores and juniors attending several different universities, perceptions of racial-ethnic tensions and experiences of discrimination affected numerous dimensions of adjustment to their college experiences (Hurtado, Carter, & Spuler, 1996).

In addition to the stresses of racism, many Latino students also struggle with the psychological and social impact of functioning within two different cultures (Torres, 1999). Feeling isolated, alienated, or "nonentitled," Latino students are often faced with the need to adopt a bicultural understanding of themselves as Latino young adults attempting to navigate the White cultural world of academia (DeFreece, 1987). Bicultural adaptation is an example of a healthy coping strategy, but one that can be very stressful as Latino students are challenged to maintain their cultural values and identity

while adjusting to the university culture and environment (Gloria & Robinson Kurpius, 1996).

In summary, the transition to college, which involves social, emotional, and academic adjustments, is a normal but often very stressful life event. The stressors associated with that transition might be greatest for students attending a college or university where the predominant racial and/or ethnic culture differs from their own. The aforementioned research studies predominantly examined the variables involved in academic persistence for Black and Latino college students without looking specifically at the unique adjustment problems of minority women. The pressures and strain of college, from academics to social life, magnify female students' problems with body image and weight because women often use food or restriction of food as a means of calming and/or coping (Hesse-Biber, 1996). A Black or Latina female college student may be especially vulnerable to the continuum of disordered eating as she copes with the additional stressors associated with her minority status within a White college or university environment.

Protective Factors Against Disordered Eating in College Women

Epidemiologists, after studying thousands of lives through time, have consistently found that close, intact relationships predict health. Compared with those with few social ties, people supported by friends, family, fellow members at school, work, church or other support groups are less vulnerable to ill health and premature death (Myers, 2000). The problem of disordered eating in female college students is a serious health concern but there has been a paucity of research specifically focused on eating pathology and relationship connections (Steiner-Adair, 1990). The Stone Center's Relational Model

proposes that relational health within peer, mentor, and community relationships is associated with mental health and adjustment in college-aged women (Liang et al., 2000). This research study hypothesized that relational health is a protective factor in the development of attitudes and behaviors associated with the continuum of disordered eating in Black, Latina, and White female college students.

Peer Relationships

Positive experiences of friendship contribute significantly to cognitive, social, and moral development as well as to psychological adjustment and socioemotional health for adolescents (Brown, Way, & Duff, 1999). In a study of 1,131 fifteen to sixteen-year-old teenagers, Vilhjalmsón (1994) found that parental support had the largest effect on self-assessed health, closely followed by friend support, and support by other adult figures. However, Eder (1985) more than a decade ago, stated that very few studies have focused on female peer relationships during adolescence and even less research has looked at girls' friendships with other girls. This statement remains true even today especially in the field of psychological research. Despite evidence that peer relationships are critically important for adolescents and young adults, little is known about the intricacies, nuances, and contexts of female friendships especially in young women of color (Brown et al., 1999).

An increasing number of theorists have noted the different 'cultures' that are manifest in male and female peer relationships (Bukowski, Newcomb, & Hartup, 1996). Maccoby (1990) stated that interactions between females place priority on the building of interpersonal connections, whereas interactions between males are more directed toward the enhancement of individual status. In addition, the socializing influences of peer

relationships rival, and in some respects surpass, the socializing influence of parental figures (Maccoby, 1990). Young females tend to evaluate close friendships with other females equally as intimate or even more intimate than they rate their relationships with their parents (Blyth & Foster-Clark, 1987).

Beginning in early adolescence, girls report more frequent interactions of an intimate and supportive nature with female friends than boys do with their male friends (Johnson et al, 1999). Wright (1982) characterized female friendships as "face-to-face" with an emphasis on talking and male friendships as having a "side-by-side" orientation focused on doing things together such as sports and competitive games. Furman and Buhrmester (1992) studied 200 12- to 15-year-old male and female adolescents and asked them via telephone interviews to recount the social events of the preceding 24-hour period. They found that female friendships provided more opportunity than male friendships for the fulfillment of interpersonal or communal needs. Females reported more frequent interactions with friends, and also substantially higher levels of self-disclosure and emotional support in daily interactions (Furman & Buhrmester, 1992). Waldrop and Halverson (1975) found that young girls who had "intense and intimate" friendships were rated as more socially mature than other girls, whereas young boys who were rated as more socially mature had a "greater number" of friends.

The results of several large prospective epidemiological studies such as the Alameda County Population Monitoring Study (Berkman & Syme, 1979), the Tecumseh Community Health Study (House et al., 1982), and the Evans County, Georgia Study (Schoenbach et al., 1986) highlight the significance in the connection of physical health and social support network size for men but not for women. Women tended to benefit

more from relationships with other female friends and relatives who are more intimate and nurturing thus providing better emotional support. Wheeler et al. (1983) stated that high numbers of social contacts do not ward off feelings of loneliness for an individual. Only when these relationships involve emotional intimacy and disclosure, a person no longer experiences loneliness.

VanderVoort (1999) studied 280 college undergraduate students in order to examine the relationship between social support and mental and physical health. In this study, poor functional support or quality of support was related to mental and physical health problems while structural support or social network size was not. Women in this study reported significantly more satisfaction with their social support systems and less feelings of isolation. VanderVoort (1999) concluded that intimate, emotional support meets our emotional needs by enabling individuals to feel valued as well as process or work through their emotional difficulties. Processing feelings and meeting one's emotional needs also helps ward off chronic negative affects such as depression, anxiety, and hostility which have been shown to be related to poor physical health (VanderVoort, 1995).

A consistent finding of a variety of research studies is that the integrating experiences of involvement, engagement, and affiliation are central to students' healthy development and progress in college (Hurtado & Carter, 1997). Schwitzer et al. (1999) stated that a critical factor in the retention and success of African American students at predominantly White universities is the individual student's experience of the campus social environment. Academic, institutional, personal-emotional, and social adjustments are the major demands facing all college students. Of these four, adjusting to the social

environment seems to be central to the success of many Black students in White institutional settings (Schwitzer et al., 1999).

Gloria, Robinson, Kurpius, Hamilton, and Wilson (1999) examined the influence of social support, university comfort, and self-beliefs on the persistence decisions of 98 African American undergraduates enrolled in a predominantly White university. The sample included nearly three times as many females as males. Each of the three constructs significantly predicted persistence, with social support and university comfort as being the strongest predictors. Watson and Kuh (1996) found that the quality of African American students' relationships with peers, faculty, and administrators tended to be as important as individual academic effort in their scholastic achievement. Additionally, descriptions of ethnic/racial minority families as cohesive and interdependent contribute to an expectation that positive interpersonal attachments are salient to the psychological adjustment of Black college students (Kenny & Perez, 1996).

Conversely, negative interpersonal experiences in predominantly White university settings can limit or mediate the ability of some Black students to engage in learning, developmental programs, and other valuable opportunities that are an integral part of campus life (Schwitzer et al., 1999). A common example of negative interpersonal experiences are African American students living on campus and being confronted with unwelcoming residence hall environments, less friendly peers, and racial problems which were undetected by other White college students in similar residential situations (Johnson-Durgans, 1994).

A Latino teenager's experience of growing up in America has been described as *entremundos* meaning between two worlds (Falicov, 1998). This is often an uneasy

period of coexistence between two very different cultural orientations, languages, sets of values, and philosophies of life. The development of a coherent ethnic identity, which encompasses knowing and valuing who one is socially and ethnically, is critical to effective coping and a healthy outlook on life (Falicov, 1998). However, the degree to which Latino college students adhere to cultural prescription varies by age, proximity to culture and family, and interactions with friends and others of similar ethnic background (Sodowsky, Lai, & Plake, 1991). Higher education, with its inherent exposure to differing cultures and new experiences, may either solidify or threaten Latino students' abilities to function in a healthy and effective way (Ethier & Deaux, 1990).

Gloria and Rodriguez (2000) stated that in struggling with their cultural identity and formulating their role and function in the collegiate environment, Latino students have found that different forms of social support are very helpful. Social support refers to the helpfulness of social relationships and is a recognizable buffer to the negative influences of stressful events and depression in Latinos (Briones, Heller, Chalfant, Roberts, Aguirre-Hauchbaum, & Farr, 1990). For Latinos, family is a primary means of social support and adherence to *familismo*, a strong sense of family centrality and importance, is a core value. Latinos in general do not value individuation from one's parents and family to the same extent as those of the dominant culture. Greater value is placed instead on relationships in which individual needs are secondary to the welfare of the family or group (Gloria & Rodriguez, 2000). For young adults in college who are away from home and family for the first time, peer relationships take on additional importance as a primary social support system that facilitates psychological and physical well-being. Close friendships, considered by many social scientists to be the most

satisfying and rewarding of all human relationships, are very important for the social, emotional, and physical health of all adolescents and young adults regardless of ethnicity or race (Brown et al., 1999).

In looking at this important developmental stage of later adolescence, Striegel-Moore and Smolak (1996) stated that several studies have reported a link between stressful life events such as college adjustment and the onset of eating disorders. Strober (1984) found that the magnitude of life stress experienced by eating disordered patients 18 months prior to the onset of their disorder was 2.5 times greater than that of a normative sample of female adolescents. Smolak, Levine, and Gralen (1993) found that girls whose transition to middle school coincided with other stressors such as the onset of dating and menarche were significantly more likely to have elevated scores on the EAT-26 (Garner et al., 1982) when compared with girls whose school transition was not accompanied by other stressors. Smolak and Levine (1996) stated that the availability of social support as an adolescent enters middle school or moves away to college may either buffer or intensify the stresses of these pivotal adolescent transitions and thereby affect potential eating pathology.

In summary, there is a relationship between physical and psychological health and peer relationships for adolescents and young adults. Especially for young women, support that is intimate and nurturing is most beneficial and in addition, reflects the Relational Model characteristics of mutual engagement, authenticity, and empowerment or zest. This research finding is also valid for Black and Latina women who struggle with adjustment to predominantly White university environments. Since there is a paucity of research on peer relationships and disordered eating, this study hypothesized

that peer relationships may also act as a protective factor in disordered eating in ways that are similar to the positive effects of social support on social, emotional, and physical health. In addition to peer relationships, mentoring relationships may also have a significant influence in the well-being of female college students.

Mentor Relationships

Adolescents consistently identify non-parental adults as playing a very important role in their psychological development (Blyth, Hill, & Smith, 1982). Despite this fact, there is a paucity of research on the impact and nature of mentoring relationships for adolescents and young adults and even less research on female mentoring relationships. Most of the literature on mentoring has focused exclusively on adult professional development and career advancement (Carden, 1990).

The word "mentor" is derived from the classical Greek character Mentor, an old and trusted friend of Ulysses who was charged with the care of Telemachus, Ulysses' son. A definition and model for mentoring evolved from this first mentor as the development of a relationship that is characterized by an individually delivered and intentional process that is supportive, nurturing, insightful, and protective (Scott, 1992). Over the past several decades, mentoring in America has become an integral part of the business world. Senior executives in big business who had a mentoring relationship reached their positions at a younger age and earned a higher income (Roche, 1979). Businesses continue to be firmly entrenched in the benefits of mentoring and support formal programs to develop mentoring relationships (Scott, 1992).

In his research study based on longitudinal interviews with 40 men in varied career pursuits, Yale developmental psychologist Levinson (1978) described mentoring

as a form of a love relationship. Functioning as guides, teachers, and sponsors, mentors help their protégés realize their goals and dreams in life. Levinson (1978) maintained that the mentoring relationship is one of the most important developmental relationships a person can have in early adulthood. This psychosocial view of mentoring from the prospective of adult growth and development differs from the concept of mentoring in the business world (Beck, 1989) and is more closely aligned with mentoring in an educational setting. In the field of education, the main focus of the mentor-protégé relationship is experiential learning. Mentors in education facilitate learning by acting as teachers, guides, counselors, role models, and friends (Beck, 1989).

A review of the literature describing beneficial mentoring relationships in educational settings identified three general categories of components that are helpful to female college students: (a) psychosocial support, (b) role modeling, and (c) professional development (Jacobi, 1991). Within the psychosocial arena, supportive mentors have offered opportunity for growth of self-awareness and identities, which have resulted in, increased assertiveness, positive presentation of self, and high career expectations (Bruce, 1995). Role modeling affords young women the opportunity to see other women in a variety of situations successfully balancing career and personal goals and thereby challenging sociocultural beliefs and attitudes, which are self-limiting (Shakeshaft, Gilligan, Pierce, 1984). Finally, mentors have assisted in professional development by offering visibility, protection, and sponsorship as well as facilitating student interaction with a variety of people in career promoting endeavors (Bruce, 1995).

Soucy and Larose (2000) studied 158 academically at-risk adolescents (63 males, 95 females, 16-20 years old) in order to determine the value of mentoring contexts as

determinants of adolescent adjustment. The students completed questionnaires twice during their first semester of college, once before and once again after they participated in a mentoring program. Soucy and Larose (2000) found that the perception of a secure relationship with a mentor was predictive of adolescent adjustment to college. Nora, Cabrera, Hagedorn, and Pascarella (1996) in a national study of 3,900 freshman college students found that for females only, the most significant positive effect on college persistence came from mentoring experiences in the form of nonclassroom interactions with faculty.

Despite the widely acknowledged benefits to both protégé and mentor, mentoring has been focused primarily within the population of White men. European American women and ethnic minorities of both genders have historically been underrepresented in the mentoring process (Atkinson, Casas, & Neville, 1994). According to Blackwell (1989), mentors tend to select protégés who are of the same gender and who share social and cultural attributes such as race, ethnicity, religion, and social class. This tendency of mentors to select same sex and ethnicity protégés is problematic in educational settings because women and ethnic minorities are so underrepresented among university faculty and staff positions (Atkinson et al., 1994).

Having ethnically similar mentors who have successfully traversed the academic environment may create a sense of vicarious self-efficacy or a belief in one's ability to persist in their pursuit of higher education especially for minority students on predominantly White college campuses (Gloria et al., 1999). Absence of powerful Black figures as role models has strong effects on the feelings of loneliness and isolation of Black students. Because Black students are dealing with racism and face a difficult

adjustment to a White university, they are particularly in need of a person that they can turn to for advice and guidance (Sedlacek, 1999).

Latino students in the university environment face a similar dilemma. Gloria and Rodriguez (2000) stated that role models and mentors not only serve as primary social support for Latino students, they also provide help in increasing academic persistence. An analysis by the Hispanic Association of Colleges and Universities (1995) reported a faculty to student ratio of 1 to 76 for Latinos, compared with a ratio of 1 to 54 for African Americans, and 1 to 24 for White students. Although empirical research with Latino students in mentor-protégé relationships is limited, Fiske (1988) suggested that Latino students and other racial/ethnic minority students who attend predominantly White institutions can be positively guided through their experience of "culture shock" stemming from being on their own, overt and covert discrimination, and the loneliness and tensions inherent in finding their way within an alien culture. Gloria and Rodriguez (2000) stated that Latino students who have a mentor who takes personal and academic interest in their educational experiences are more likely to succeed in the university environment.

Whereas the traditional male-to-male mentoring models within the business world rely on an acceptance of hierarchy and focus on task activities, females appear to desire more psychosocial and emotional support in their mentoring relationships (Kalbfleisch & Keyton, 1995). In support of this premise, Ball (1989) suggested that a good mentor for a woman (and maybe a man) is more than a good role model, a mentor is also a teacher, a sounding board, a cheerleader, and a friend. Kalbfleisch and Keyton (1995) stated that if gender plays a role in accounting for differences in friendships, it is also likely that the

mentoring experience will be different as well. In support of this contention, Reich (1986) found that more women than men noted that their relationships with mentors (67% versus 42%) and protégés (63% versus 44%) developed into close friendships.

In comparing male-to-female and female-to-female mentoring relationships, Jeruchim and Shapiro (1992) stated that affective, or emotional quality is more vital for women than for men. More importantly, developing intimacy in a female mentoring relationship yields increased levels of productivity and development for the relationship while avoiding the negative effects of possible sexual overtones. Worell and Remer (1992) underscored the therapeutic nature of female-to-female mentoring relationships and stated that women may receive ancillary benefits beyond those normally accrued through the mentoring process. Kalbfleisch and Keyton (1995) stated that greater intimacy, based on sharing, self-disclosure, listening, and building rapport is more likely to build stronger mentor-protégé relationships. These are some of the same qualities identified as growth-producing in Relational Model relationships.

Kalbfleisch and Keyton (1995) studied 56 mentor-protégé relationship pairs in an attempt to examine the dynamics of female mentoring relationships. They found that the nature of these relationships closely reflected models of female friendship that are characterized by emotional intimacy and differ from the more hierarchical and task-oriented male mentorships and friendships. In another study of urban adolescent girls, Leadbeater and Way (1996) found that those girls who had mentors that listened, understood, and validated their experiences and feelings evidenced transformations in personal confidence and ability and were encouraged to develop strategies of resistance

that maintained health. These mentoring relationships appeared to serve as a buffer against a variety of social stressors.

Mentoring relationships in educational settings are helpful in the psychosocial support of college women in addition to being influential in role modeling and professional development. There has been little empirical research that has specifically examined the effects of mentoring relationships on struggles with disordered eating. It is possible that mentoring relationships that involve mutual engagement, authenticity, and empowerment/zest may be a potential protective factor for female college students in their struggles with the continuum of disordered eating.

Both peer relationships and mentoring relationships are defined by the dynamics of dyadic communication. Another type of relationship structure, group or community affiliation, has also been shown to have a beneficial impact on an individual's social and psychological functioning.

Community Relationships

In addition to dyadic relationships such as close peer and mentor relationships, community or group affiliation has been shown to have a significant impact on social, psychological, and physical functioning. Community relationships contribute to an individual's sense of belonging (Liang et al., 2000). Maslow (1954) stated that human behavior could be explained as motivation to satisfy needs. He identified belonging as a basic human need, ranking it third in his hierarchy. Anant (1966) posited that belonging is the missing conceptual link in understanding mental health and mental illness from a perspective of relationships and interactions. Anant's (1967) early empirical research on belonging, described initially as the recognition and acceptance of a member by other

members in a group, suggested that there was an inverse relationship between the construct of belonging and anxiety. Anant (1967) however, questioned the validity of his belonging measure and stated that it may have tapped dependence rather than the construct of belonging.

Narrative accounts of a sense of belonging depict its importance for psychological and physical well-being (Hagerty & Patusky, 1995). Dasberg (1976) interviewed battle-fatigued Israeli soldiers and reported descriptions of feelings of loss of belonging, of being cut-off and uprooted, abandoned, rejected, and psychologically severed. He stated that the lack of a sense of belonging was the common denominator in the soldiers' mental breakdowns during war. World War II Holocaust child survivors reported that they felt they did not belong anywhere in terms of country, social group, or age after being rescued from the Nazi concentration camps (Kestenberg & Kestenberg, 1988). Kestenberg and Kestenberg (1988) stated that belonging is an important component of identity and object relations and that a child grows and develops a sense of belonging not only to family, but also to community, cultural group, and nation.

Researchers who have studied the role of social relations in health promotion have suggested that social network ties and social integration influence mortality (Hagerty & Patusky, 1995). Between 1979 and 1994, there have been eight longitudinal community-based prospective studies that reveal an association between social ties and mortality rates from a broad range of diseases. Although there were substantial variations among these studies in measurement of social relationships, in types of communities investigated, and length of follow-up, the results were remarkably consistent. In almost all cases, those individuals who were most socially isolated and disconnected were at

increased mortality risk (Berkman, 1995). Berkman (1995) stated that for social support to be health promoting, it must provide not only a sense of belonging and intimacy, but it must also help people to be more competent and self-efficacious. Similarly, Relational Model theorists have also stated that the characteristics of growth-fostering relationships empower individuals by increasing a sense of self-worth, vitality, validation, knowledge of self and others, and a desire for further connection (Liang, 2000).

Hagerty, Lynch-Sauer, Patusky, Bouwsema, and Collier (1992) posited that sense of belonging represents a unique relational phenomenon that is different from the singular constructs of loneliness and alienation. They defined sense of belonging as the experience of personal involvement within a particular environment or system so that the persons feel themselves to be an integral part of that environment or system. Sense of belonging was proposed to have two defining attributes: (1) valued involvement or the experience of feeling valued, needed, or accepted, and (2) fit, the perception that the individual's characteristics articulate with or compliment the environment or system (Hagerty et al., 1992). Hagerty et al. (1996) in a study of 379 community college students (59% female) postulated that a lower sense of belonging is related to poorer psychological functioning, which can be represented by depression, loneliness, anxiety, history of psychiatric treatment, and suicidality. They also stated that sense of belonging seems to be more strongly related to both social and psychological functioning for women than for men. In addition, women when compared to men were more likely to report a sense of belonging due to their community relationships and involvement.

In a study of 31 clients diagnosed with and in treatment for major depression and 379 students in a midwestern community college, Hagerty and Williams (1999) examined

the effects of sense of belonging, social support, conflict, and loneliness on depression. According to results of this study, a sense of belonging was a better predictor of depression than perceived social support. Hagerty and Williams (1999) posited that perceived social support refers to the perceived presence or absence of potentially supportive relationships, while sense of belonging is related to the perception of self as integrated within an interpersonal system. This experience of integration involves multiple components of cognition, emotion, and behavior that speak to the quality and specific characteristics of interpersonal relationships (Hagerty & Williams, 1999). This construct of sense of belonging shares many of the defining characteristics of the Stone Center's Relational Model of relational health.

Hurtado and Carter (1997) reported that a consistent finding of a variety of research studies is that the integrating experiences of involvement, engagement, and affiliation are central to students' development and progress in college. In their study of 272 Latino students (58.1% female and 41.9% male), Hurtado and Carter (1997) found that membership in religious and social-community organizations were strongly associated with students' sense of belonging within the university environment. In addition, these organizational memberships seem to have strong external-to-campus affiliations that helped students maintain some link with the communities that they were familiar with before they entered college.

Sedlacek (1999) suggested that Black students need to have identification with and be active in a community as part of their support system. This community may be on or off campus, large or small, but will commonly be based on components of race and/or culture. Because of racism, Black students have historically been excluded from being

full participants in many White organizations within the educational system even though Blacks seem to be more community oriented than Whites (Sedlacek, 1999). Bohn (1973) found that a high score on the Community scale of the California Psychological Inventory was associated with Black student success in grades and college retention. Davis (1991) studied 888 Black college undergraduates and stated that Black students' college experiences were more favorable when there was involvement and participation in extracurricular activities sponsored by campus organizations such as clubs, fraternities, sororities, and interest groups. Attinasi (1989) stated that minority students who made sense of their environments through group memberships that also helped them acquire needed college skills, also benefited by being linked to the larger whole of campus life.

Harris (1992), in a qualitative study of 54 African American young women (14 to 25 years old), stated that a sense of belonging for the African American female is defined by the cultural construct of interdependence which starts during childhood and involves a familial type attachment to both family and community. This sense of belonging has served as a strength for African Americans and has helped to mitigate feelings of isolation and detachment (Harris, 1992).

Swift and O'Dougherty Wright (2000) studied whether specific functions of social support buffered the relationship between different types of stressful life events and anxiety and depression in 60 college women. They found that belonging support and self-esteem support were the most significant buffers of specific stressors. Belonging support, which was indicated by feelings that one has others with whom to engage in activities, decreases a female's chances of experiencing symptoms of anxiety and depression. Self-esteem support also buffered the relationship between interpersonal

events and anxiety and depression (Swift & O'Dougherty Wright, 2000). Relational theory suggests that a woman's self-esteem is strongly affected by her ability to maintain mutually intimate emotional connections within relationships (Miller & Stiver, 1997).

Within a community perspective, Spencer (1998) implemented a hospital-based outpatient psychiatric treatment program for women based on the Relational Model. In this group setting, healing occurred in the context of connected relationships and therefore building connections among the participants was central to the success of the program. In another group research study, Tantillo (1998) developed a relational approach to group therapy for women with bulimia nervosa. Through promoting validation, self-empathy, mutuality, and empowerment, the group members learned to identify and change relational patterns that have kept them connected with food and disconnected from themselves and others. The goal of treatment was to help women move toward mutually empathic and empowering relationships inside and outside the group (Tantillo, 1998).

Resilient adolescents and young adults are sociable and able to seek and garner social support from a variety of sources (Johnson et al., 1999). In contrast, females who struggle with disordered eating often report a sense of isolation, social anxiety, impoverished relationships, public self-consciousness, and a failure to seek social support (Szmukler, Dare, & Treasure, 1995). Research studies have shown that community relationships that promote a sense of belonging and are defined by the growth-producing qualities of the Relational Model have had a beneficial influence on the physical and psychological health of women. Therefore, this research study hypothesized that

community relationships may be a potential protective factor for Black, Latina, and White female college students in their struggles with disordered eating.

Chapter Summary

The research literature reviewed herein provided supporting evidence for a study of relational health and disordered eating in Black, Latino, and White female college students. The beneficial impact of different types of social support on the physical and psychological health of young women was validated by various research studies. Consistent with this research, social support via the growth-producing qualities of the Relational Model was hypothesized to have a positive influence on college women's struggles with the continuum of disordered eating.

This chapter included information about traditional theories of human psychological development and the Wellesley College Stone Center's Relational Model of female psychological development and well-being. The nationwide epidemic of disordered eating on college campuses was described in addition to the salient risk factors, which included sociocultural context, college adjustment, and racial and ethnic factors. Possible protective factor against the struggles with disordered eating in female college students were hypothesized as peer, mentor, and community relationships.

Disordered eating in the female college population has been researched extensively, but there is a paucity of research focused specifically on these young women and their relationships. In addition, research on the relationships of eating disordered minority college women is virtually nonexistent. The importance of social support and relationships to the physical and psychological health of girls and young women has been well documented in the research literature. Therefore, this study hypothesized that

relationships also play a part in the dynamics of disordered eating for female college students. This study provides researchers, health educators, counselors, and other health care providers information about potential protective factors in the struggles with disordered eating and can also lead to the development of more effective programs of prevention, education, and intervention with eating disordered college women.

CHAPTER 3 METHODOLOGY

Overview

The purpose of this study was to examine the relationship between White, Black, and Latina college women's peer, mentor, and community relationships and their disordered eating attitudes and behaviors. A correlational design for survey research was utilized. Data were gathered on peer, mentor, and community relationships, as measured by the Relational Health Indices (RHI) and on eating disordered attitudes and behaviors as measured by the Eating Attitudes Test-26 (EAT-26).

This chapter describes the methodology employed in this study. It includes descriptions of the population, sample, sampling procedures, research design, instrumentation, and data analysis. The chapter concludes with a discussion of the methodological limitations of this study.

Population

The population from which the sample for this study was drawn is undergraduate White, Black, and Latina female students from a large co-ed residential university in the southeastern United States. Total university enrollment for the fall 1999 semester was 44,276 students with 75% of this number being undergraduate students. The ratio of women to men is 51:49. Black student enrollment is approximately 6.5% or 2,900

students and Latino/a students number approximately 4,200 or 9.4% of the total student population (University of Florida, 2000).

Sampling and Sampling Procedures

The mail survey packet was sent to a stratified random sample of 480 female undergraduate students. This sample consisted of three groups, 160 in each group, of White, Black, and Latina female undergraduate students. Separate lists of current female White, Black, and Latina undergraduate students were acquired from the university Registrar's office. Freshmen were not included since data collection occurred in the fall semester and it was proposed that these students would not have had enough time at the university to establish collegiate relationships. Recent community college transfers were also eliminated for this same reason.

After obtaining IRB approval for the sample and the methodology, each randomly selected student was mailed a packet which contained a cover-request to participate letter, two assessment instruments with specific instructions for completion, and a return self-addressed stamped envelope. One week later a follow-up postcard was sent to each randomly selected student. Follow-up emails and phone calls were also made to students that had not yet returned the mail survey packets.

Design

The design for this study was a correlational design for survey research. The independent variables were White female peer, mentor, and community relationships, Black female peer, mentor, and community relationships, and Latina female peer, mentor, and community relationships. The dependent variable was problem eating or more

specifically disordered eating attitudes and behaviors. The independent variables were operationalized by the three scales (peer, mentor, and community) of the Relational Health Indices (RHI) in addition to the variable of ethnicity. The Eating Attitudes-26 (EAT-26) operationalized the dependent variable.

Instrumentation

Relational Health Indices

The Relational Health Indices (RHI; Liang et al., 2000) is a new instrument that measures women's relationships. It is comprised of three scales that assess growth-fostering connections with peers, mentors, and communities. The RHI was developed using the Stone Center's Relational Model, a theory of girls' and women's psychological development (Jordan et al., 1991; Miller & Stiver, 1997). Within each of the three relationship domain scales, there are three subscales that have been identified as key aspects of growth-fostering relationships. These subscales are empathy/engagement, authenticity, and empowerment/zest.

The Peer Relationship scale (RHI-P) contains 12 items, the Mentor Relationship scale (RHI-M) contains 11 items, and the Community Relationship scale (RHI-C) contains 14 items. Subjects rated these relationship domains according to a five-point Likert-type scale with the responses "never, seldom, sometimes, often, and always" with corresponding values from one to five. A high mean composite score on each of these scales corresponds to a high degree of relational health in the context of peer, mentor, and community relationships. The subscale composite Cronbach's alpha coefficients for internal consistency are peer = .85, mentor = .86, and community = .90 (Liang et al., 2000). The RHI was developed for a female college student population.

Convergent validity ($r = .69$) has been assessed by the correlation of the RHI-P scale and the Mutual Psychological Development Questionnaire (MPDQ; Genero et al., 1992). The MPDQ is a 22-item instrument that measures Relational Model concepts in close dyadic relationships. The RHI-P was also very similar to two of the scales of the Quality of Relationship Questionnaire (QRI; Pierce, Sarason, Sarason, & Solky-Butzel, 1997), the Support scale ($r = .61$) and the Depth of Relationship scale ($r = .64$). The QRI also assesses aspects of a dyadic relationship. Moderately high positive correlations ($r = .50$) were also found between the RHI-P and the Friend Support subscale of the Multidimensional Scale of Perceived Social Support (MSPSS; Zimet, Dahlem, Zimet, & Farley, 1988). This 4-item scale measures perceived social support from friends (Liang et al., 2000).

Convergent validity for the RHI-M is similar to that of the RHI-P. When correlated to the MPDQ, the relationship is $r = .68$. The correlations with the QRI Support scale ($r = .58$) and Depth of Relationship scale ($r = .51$) are both moderately strong (Liang et al., 2000). Both the MPDQ and the QRI were designed for assessing dyadic relationships and there is no equivalent measure for assessing the convergent validity of the community relationship scale (Liang et al., 2000).

Concurrent validity was measured using several psychological outcome scales. The RHI-P, RHI-M, and the RHI-C relationship scales were all negatively correlated ($r = -.35, -.14, -.47$) with the UCLA Loneliness Scale (RULS; Russell, Peplau, & Cutrona, 1980). The RHI-C scale was also negatively correlated ($r = -.39$) with the Center for Epidemiological Studies Depression Scale (CES-D; Radloff, 1977) and negatively correlated ($r = -.32$) with the Perceived Stress Scale (PS; Cohen, Kamarck, &

Mermelstein, 1983). The Relational Health Indices (RHI) has good reliability and validity and has utility as a new quantitative instrument that can be used for theory development of the Stone Center's Relational Model of female psychological development.

Eating Attitudes Test-26

The Eating Attitudes Test-26 (EAT-26; Garner et al., 1982) is a 26-item self-report questionnaire designed to measure the degree to which respondents possess a variety of behaviors and attitudes associated with disordered eating (Heesacker & Neimeyer, 1990). The original version of the Eating Attitudes Test (EAT; Garner & Garfinkel, 1979) consisted of 40 forced-choice items rated on a six-point Likert-type scale. Respondents rated whether each item applies "always, very often, often, sometimes, rarely, or never." The higher the score, the more symptomatic the respondent. The 26-item version of the EAT was subsequently developed from factor analyses when items not loading on any of the three factors (dieting, bulimia and food preoccupation, and oral control) were eliminated (Garner et al., 1982). The total score of the EAT-26 is highly correlated ($r = .97$ for female college students) with the 40-item EAT total score (Hersen & Bellack, 1988).

The EAT-26 consists of three factors. Factor I, dieting, reflects a pathological avoidance of fattening foods and shape preoccupations. Respondents who score highly on Factor I are overestimators of their body size and may be dissatisfied by their body size and shape but are not bulimic. Factor II, bulimia and food preoccupation, is positively related to bulimia and a heavier body weight. Factor III, oral control, reflects self-control about food as well as an acknowledgement of social pressure to gain weight

(Garner et al., 1982). All three factors are combined in an overall total score that reflects a variety of behaviors and attitudes associated with disordered eating.

When scoring the EAT-26, Garner et al. (1982) recommend that the responses “never, rarely, and sometimes” receive a score of 0, while the responses “often, very often, and always” receive scores of 1, 2, and 3, respectively. Total scores may range from 0-78. Higher scores signify more extreme pathology on each of the three factors. Higher total scores indicate more pathological eating symptomatology overall. A score equal to or greater than 20 reflects eating patterns, dieting, and preoccupations with body weight that interfere with normal psychosocial functioning (Garfinkel & Garner, 1982). The EAT-26 can also be used as a continuous measure of eating disturbances in a nonclinical population (Koslowsky, Scheinberg, Bleich, Mark, Apter, Danon, & Solomon, 1992). In the statistical analyses in this study, EAT-26 scores were treated as a continuous variable and the participants’ total score was equal to the sum of all of the coded responses.

The EAT-26 has been used to assess the presence of eating pathology in both clinical and non-clinical settings (Hersen & Bellack, 1988). While this instrument may indicate the presence of disordered eating attitudes and behaviors, it does not reveal the motivation or possible psychopathology underlying the disturbed eating patterns (Garner et al., 1982). Therefore, the EAT-26 may be most suitable as either a treatment outcome measure in clinical groups or as a screening instrument in non-clinical settings to identify individuals who have disturbed eating patterns (Hersen & Bellack, 1988).

Internal consistency ($\alpha = .94$) and test-retest reliability ($r = .84$) of the EAT-26 are excellent (Garfinkel & Garner, 1988). Gross et al. (1986) found total scores of the

EAT to be moderately correlated with the three eating disorder symptom scales (Drive for Thinness $r = .81$; Body Dissatisfaction $r = .50$; Bulimia $r = .42$) of the Eating Disorder Inventory (EDI; Garner, Olmsted, & Polivy, 1983). Williamson (1990) reported unpublished data from a sample of both clinical and nonclinical subjects and found the EAT to be moderately correlated ($r = .67$) with the Bulimia Test (Smith & Thelan, 1984) and the Eating Questionnaire-Revised ($r = .59$; EQ-R; Williamson, Davis, Goreczny, Bennett, & Watkins, 1989).

Button and Whitehouse (1981) administered the EAT to a large sample of students at a technical college and reported that this assessment instrument was useful in identifying study participants with abnormal concerns regarding eating and weight. Thompson and Schwartz (1982) used the EAT to identify college women with abnormal eating concerns who were later distinguished from anorexic patients with regard to social adjustment. Gross et al. (1986) demonstrated criterion validity for the EAT by discriminating bulimia nervosa subjects from normal subjects. The EAT-26 was used to compare eating disturbances between Japanese and American college women (Mukai, Kambara, & Sasaki, 1998) and in another study, EAT scores in both Asian and Caucasian college women were significantly positively correlated with fear of fat (Sanders & Heiss, 1998). Jane, Hunter, and Lozzi (1999) administered the EAT-26 to Cuban American women in order to discern whether continuing identification with and participation in aspects of Cuban Hispanic culture may serve as a mitigating factor in the predisposition and development of eating disorders. Due to wide and varied use over time, the EAT and the EAT-26 have been found to have very good concurrent, predictive, and discriminant

validity (Williamson, Anderson, & Gleaves, 1996). This measure of eating attitudes and behaviors was chosen for its good psychometric properties.

Data Analysis

One regression equation was used where the EAT-26 is the dependent measure with the three scales of the RHI (RHI-P, RHI-M, RHI-C) and ethnicity, and the interactions of ethnicity with the RHI-P, RHI-M, and RHI-C are the independent variables. In addition, three ANOVA's were used with the RHI-P, RHI-M, and RHI-C as dependent variables and ethnicity as the independent variable.

Hypothesis and Research Questions

Hypothesis

There is a negative relationship between the relational health of White, Black, and Latina college women's peer, mentor, and community relationships and the attitudes and behaviors related to disordered eating. One regression equation was used where the EAT-26 is the dependent measure with the three scales of the RHI (RHI-P, RHI-M, RHI-C) and ethnicity, and the interactions of ethnicity with the RHI-P, RHI-M, and RHI-C are the independent variables.

Research Questions

1. What is the relationship between peer relationships and disordered eating? A regression equation was used where the EAT-26 is the dependent measure and the RHI-P is the independent variable.

2. Does the relationship between peer relationships and disordered eating differ for White, Black, and Latina female college students? A regression equation was used

where the EAT-26 is the dependent measure and the interaction of ethnicity with the RHI-P is the independent variable.

3. What is the relationship between mentor relationships and disordered eating?

A regression equation was used where the EAT-26 is the dependent measure and the RHI-M is the independent variable.

4. Does the relationship between mentor relationships and disordered eating differ for White, Black, and Latina female college students? A regression equation was used where the EAT-26 is the dependent measure and the interaction of ethnicity with the RHI-M is the independent variable.

5. What is the relationship between community relationships and disordered eating? A regression equation was used where the EAT-26 is the dependent measure and the RHI-C is the independent variable.

6. Does the relationship between community relationships and disordered eating differ for White, Black, and Latina female college students? A regression equation was used where the EAT-26 is the dependent measure and the interaction of ethnicity with the RHI-C is the independent variable.

7. What is the relationship among White, Black, and Latina college women's disordered eating? A regression equation was used where the EAT-26 is the dependent measure and ethnicity is the independent variable.

8. What is the relationship among White, Black, and Latina college women's peer relationships? An ANOVA was used with the RHI-P as the dependent variable and ethnicity as the independent variable.

9. What is the relationship among White, Black, and Latina college women's mentor relationships? An ANOVA was used with the RHI-M as the dependent variable and ethnicity as the independent variable.

10. What is the relationship among White, Black, and Latina college women's community relationships? An ANOVA was used with the RHI-C as the dependent variable and ethnicity as the independent variable.

CHAPTER 4 RESULTS

The purpose of this study was to examine the relationship between Black, Latina, and White college females' relational health, specifically peer, mentor, and community relationships, and disordered eating attitudes and behaviors. The data collection procedures, data analyses, and results of this study are presented in this chapter.

Data Collection

One hundred-sixty research packets were sent to a stratified randomized sample of Black, Latina, and White sophomore, junior, and senior undergraduate college females for a total sample of 480 students. Each research packet contained a cover-request to participate letter, the Relational Health Indices (Peer, Mentor, and Community Scales) and the Eating Attitudes Test-26, and a self-addressed stamped envelope. Approximately one week after the packets were mailed, a follow-up postcard was sent to each student in the study. Subsequent follow-up emails were also sent.

A total of 237 (49.3%) packets were returned which included 68 (42.5%) undergraduate female Black respondents, 77 (48.1%) undergraduate female Latina respondents, and 92 (58.1%) undergraduate female White respondents. All 68 Black students completed the Relational Health Indices Peer Scale (RHI-P) and the Eating Attitudes Test-26 (EAT-26), 59 Black students completed the Relational Health Indices Mentor Scale (RHI-M), and 66 Black students completed the Relational Health Indices Community Scale (RHI-C). All 77 Latina students completed the RHI-P and the EAT-

26, 72 Latina students completed the RHI-M, and 74 Latina students completed the RHI-C. All 92 White students completed the RHI-P and the EAT-26 and 90 White students completed the RHI-M and RHI-C. Summary statistics are presented in Table 1.

Table 1

Summary Statistics

Variable	N	Mean	Standard Deviation
<u>Black</u>			
RHI-P	68	46.12	6.95
RHI-M	59	44.24	7.55
RHI-C	66	44.56	10.93
EAT-26	68	55.24	16.14
<u>Latina</u>			
RHI-P	77	49.05	5.66
RHI-M	72	43.75	7.74
RHI-C	74	46.27	10.15
EAT-26	77	63.09	20.09
<u>White</u>			
RHI-P	92	49.79	5.59
RHI-M	90	44.88	7.07
RHI-C	90	49.11	10.04
EAT-26	92	63.40	19.15

Data Analyses

Hypothesis

There is a negative relationship between the relational health of White, Black, and Latina college women's peer, mentor, and community relationships and the attitudes and behaviors related to disordered eating. One regression equation was used where the EAT-26 is the dependent measure with the three scales of the RHI (RHI-P, RHI-M,

RHI-C) and ethnicity, and the interactions of ethnicity with the RHI-P, RHI-M, and RHI-C are the independent variables.

The regression equation included 215 observations and resulted in an R-square of 0.1433 and an adjusted R-square of 0.1143. Therefore, ethnicity, RHI-P, RHI-M, RHI-C, and the interactions of RHI-P, RHI-M, and RHI-C with ethnicity jointly accounted for 11.43% of the variation in the EAT-26 scores. Only RHI-P and RHI-C were significant predictors, at nominal alpha 0.05, of EAT-26 with p-values of 0.0103 and 0.0308, respectively. Results are presented in Table 2.

Table 2

Regression Equation: Model 1

Source	DF	F	p-value
Ethnicity	2	1.15	0.3177
RHI-P	1	6.71	0.0103*
RHI-P*Ethnicity	2	0.39	0.6790
RHI-M	1	0.00	0.9545
RHI-M*Ethnicity	2	2.46	0.0880
RHI-C	1	4.73	0.0308*
RHI-C*Ethnicity	2	2.12	0.1232

Note. “*” denotes significance at $\alpha=0.05$.

Since all 2-way interactions were non-significant, a reduced regression model was run with the main effects (Ethnicity, RHI-P, RHI-M, RHI-C) separated out. The regression equation also included 215 observations and resulted in an R-square of 0.1139 and an adjusted R-square of 0.0970. This second regression model accounted for 9.7% of the variation in the EAT-26 scores. Results are presented in Tables 3.

Table 3

Regression Equation with Main Effects: Model 2

Source	B	SE B	Beta	F	p-value
Ethnicity				7.60	0.0007*
RHP	-0.5296	0.2256	-3.2855	5.51	0.0198*
RHM	-0.0684	0.1790	-0.5067	0.15	0.7027
RHC	-0.2755	0.1340	-2.8838	4.23	0.0410*
Intercept					
White	105.76				
Black	-11.51			13.10	0.0004*
Latino	-0.56			0.04	0.8498

Note. "*" denotes significance at $\alpha=0.05$.

Multicollinearity was tested with these regression equations: $RHI-P = RHI-M + RHI-C$; $RHI-M = RHI-C + RHI-P$; and $RHI-C = RHI-P + RHI-M$. The R-squares for these equations are 0.148, 0.125, and 0.187 respectively. Therefore, since each result is not greater than .9, the regression equation has no serious multicollinearity problem.

Research Questions

1. What is the relationship between peer relationships and disordered eating? A regression equation was used where the EAT-26 is the dependent measure and the RHI-P is the independent variable.

The equation included 237 observations and resulted in a squared correlation of 0.0258. The results indicated RHI-P is a significant predictor of EAT-26, $F = 6.23$ and $p\text{-value} = 0.0132$. The regression equation is $EAT-26 = 92.562 - 0.491(RHI-P) + \text{error}$. The results indicated that an increase of one point on the RHI-P scale predicted a decrease of 0.5 in the EAT-26 score.

2. Does the relationship between peer relationships and disordered eating differ for White, Black, and Latina female college students? A regression equation was used where the EAT-26 is the dependent measure and the interaction of ethnicity with the RHI-P is the independent variable.

The equation included 237 observations. The interaction of ethnicity and RHI-P is not significant, $F = 0.66$ and $p\text{-value} = 0.5202$. Interaction results including the main effects of ethnicity and the RHI-P are presented in Table 4.

Table 4

Interaction of RHI-P and Ethnicity

Source	Degrees of Freedom	F	p-value
Ethnicity	2	0.512	0.5962
RHI-P	1	10.71	0.0012*
RHI-P*Ethnicity	2	0.66	0.5202

Note. "*" denotes significance at $\alpha=0.05$.

3. What is the relationship between mentor relationships and disordered eating? A regression equation was used where the EAT-26 is the dependent measure and the RHI-M is the independent variable.

RHI-M by itself is not a significant predictor of EAT-26. There were 221 observations included in the equation, $F = 2.93$ and $p\text{-value} = 0.0885$.

4. Does the relationship between mentor relationships and disordered eating differ for White, Black, and Latina female college students? A regression equation was

used where the EAT-26 is the dependent measure and the interaction of ethnicity with the RHI-M is the independent variable.

The equation included 221 observations. The interaction of ethnicity and RHI-M is not significant, $F = 1.23$ and $p\text{-value} = 0.2937$. Interaction results including the main effects of ethnicity and the RHI-M are presented in Table 5.

Table 5

Interaction of RHI-M and Ethnicity

Source	Degrees of Freedom	F	p-value
Ethnicity	2	1.28	0.02798
RHI-M	1	3.06	0.0818
RHI-M*Ethnicity	2	1.23	0.2937

5. What is the relationship between community relationships and disordered eating? A regression equation was used where the EAT-26 is the dependent measure and the RHI-C is the independent variable.

The equation included 230 observations and resulted in a squared correlation of 0.0283. The results indicated RHI-C is a significant predictor of EAT-26, $F = 6.64$ and $p\text{-value} = 0.0106$. The regression equation is $\text{EAT-26} = 74.933 - 0.3042(\text{RHI-C}) + \text{error}$. The results indicated that an increase of one point on the RHI-C scale predicted a decrease of 0.3 in the EAT-26 score.

6. Does the relationship between community relationships and disordered eating differ for White, Black, and Latina female college students? A regression equation was

used where the EAT-26 is the dependent measure and the interaction of ethnicity with the RHI-C is the independent variable

The equation included 230 observations. The interaction of ethnicity and RHI-C is not significant, $F = 0.38$ and $p\text{-value} = 0.6870$. Interaction results including the main effects of ethnicity and the RHI-C are presented in Table 6.

Table 6

Interaction of RHI-C and Ethnicity

Source	Degrees of Freedom	F	p-value
Ethnicity	2	1.12	0.3293
RHI-C	1	9.46	0.0024*
RHI-C*Ethnicity	2	0.38	0.6870

Note. “*” denotes significance at $\alpha=0.05$.

7. What is the relationship among White, Black, and Latina college women's disordered eating? A regression equation was used where the EAT-26 is the dependent measure and ethnicity is the independent variable.

This equation included 237 observations and indicated that there are ethnic group differences in the mean scores of the EAT-26 scale, $F = 4.47$ and $p\text{-value} = 0.0124$. Multiple comparison procedures indicated Black scores differed from both White and Latina scores, but that White and Latina scores did not significantly differ from each other. Contrasts of the EAT-26 mean scores are presented in Table 7.

Table 7

Contrasts of the EAT-26 Mean Scores

Contrast	F	p-value
Black vs. Latina	6.40	0.0121*
Black vs. White	7.43	0.0069*
Latina vs. White	0.01	0.9231

Note. “*” denotes significance at $\alpha=0.05$.

8. What is the relationship among White, Black, and Latina college women's peer relationships? An ANOVA was used with the RHI-P as the dependent variable and ethnicity as the independent variable.

This ANOVA included 237 observations. There were ethnic group differences in the mean scores of the RHI-P variable, $F=7.74$, $p\text{-value}=0.0006$. Multiple comparison procedures indicated Black scores differed from both Latina and White scores, but White and Latina scores did not significantly differ. Contrasts of RHI-P mean scores are presented in Table 8.

Table 8

Contrasts of RHI-P Mean Scores

Contrast	F	p-value
Black vs. Latina	8.54	0.0038*
Black vs. White	14.51	0.0002*
Latina vs. White	0.63	0.4270

Note. “*” denotes significance at $\alpha=0.05$.

9. What is the relationship among White, Black, and Latina college women's mentor relationships? An ANOVA was used with the RHI-M as the dependent variable and ethnicity as the independent variable.

This ANOVA included 221 observations. There were no ethnic group differences in the mean scores of the RHI-M variable, $F=0.47$, $p\text{-value}=0.6260$.

10. What is the relationship among White, Black, and Latina college women's community relationships? An ANOVA was used with the RHI-C as the dependent variable and ethnicity as the independent variable.

This ANOVA included 230 observations. There were ethnic group differences in the mean scores of the RHI-P variable, $F=3.89$, $p\text{-value}=0.0219$. Multiple comparison procedures indicated Black scores differed from White scores, but Latina scores did not significantly differ from either Black or White scores. Contrasts of RHI-C mean scores are presented in Table 9.

Table 9

Contrasts of RHI-C Mean Scores

Contrast	F	p-value
Black vs. Latina	0.95	0.3297
Black vs. White	7.38	0.0071*
Latina vs. White	3.07	0.0812

Note. "*" denotes significance at $\alpha=0.05$.

In summary, the overall hypothesis of this research study was partially substantiated by results indicating that participants who reported higher levels of relational health, specifically peer and community relational health, also reported lower

levels of disordered eating. The first research question indicated that participants in this study who reported higher levels of peer relational health also reported lower levels of disordered eating. The second research question was not substantiated, as participants in the study did not show an ethnic difference in reported peer relational health and disordered eating. The third research question was not substantiated, as participants in the study did not report a relationship between mentor relational health and disordered eating. The fourth research question was not substantiated, as participants in this study did not show an ethnic difference in reported mentor relational health and disordered eating. The fifth research question indicated that participants in this study who reported higher levels of community relational health also reported lower levels of disordered eating. The sixth research question was not substantiated, as participants in this study did not show an ethnic difference in reported community relational health and disordered eating. The seventh research question indicated that Black participants in this study differed from both Latina and White participants in levels of disordered eating but Latina and White participants in this study did not differ significantly in levels of disordered eating. The eighth research question indicated that Black participants in this study differed from both Latina and White participants in levels of peer relational health but Latina and White participants in this study did not differ significantly in levels of peer relational health. The ninth research question was not substantiated, as participants in this study did not show an ethnic difference in reported mentor relational health. The tenth research question indicated that Black participants in this study differed from White participants in levels of community relational health but Latina participants in this study

did not differ significantly from either Black or White participants in levels of community relational health.

CHAPTER 5 DISCUSSION

The purpose of this study was to examine the relationship between Black, Latina, and White college females' relational health, specifically peer, mentor, and community relationships, and disordered eating attitudes and behaviors. The research findings related to the hypothesis and individual research questions of this study will be presented in this chapter followed by a discussion of the limitations of the study and implications of the findings and recommendations for the future.

Hypothesis Summary and Explanation of Finding

The overall hypothesis of this study was that there is a negative relationship between the relational health of Black, Latina, and White college females' peer, mentor, and community relationships and the attitudes and behaviors related to disordered eating.

This hypothesis was partially substantiated by results indicating that participants in this study who reported higher levels of both peer and community relational health also reported lower levels of disordered eating. Mentor relationships however did not significantly relate to the measured attitudes and behaviors of disordered eating.

Relational Model theorists conceptualize on-going, growth-fostering interpersonal connections as critical to women's healthy psychological development (Jordan, 1997; Surrey, 1985). Growth-fostering peer and community relationships, which reflect the relational components of mutuality, authenticity, and empowerment or zest, may act as potential protective factors in Black, Latina, and White college females'

struggles with disordered eating. This finding is consistent with many other research studies that have found that close, intact relationships predict good health in a wide variety of population samples.

Mentoring relationships, on the other hand, may not increase resilience to disordered eating due to the fact that this type of relationship, unlike peer and community relationships, is inherently defined by a power differential and is usually predicated on foundational differences in areas such as skill level, age, expertise, and education (Liang et al., 2000). One of the main theoretical tenets of the Relational Model is that growth-fostering relationships that are intimate and mutual can facilitate self-disclosure, emotional resiliency, and coping strategies (Miller & Stiver, 1997). The previously mentioned foundational differences in mentoring relationships may hinder the development of intimacy and mutuality and therefore this type of relationship may be ineffective as a protective factor against disordered eating.

Another potential factor in the lack of correlational relationship between mentoring relationships and disordered eating may be the specific characteristics of the mentors described by each participant in the study. Whereas the traditional male-to-male mentoring models within the business world rely on an acceptance of hierarchy and focus on task activities, females appear to desire more psychosocial and emotional support in their mentoring relationships (Kalbfleisch & Keyton, 1995). Worell and Remer (1992) underscored the therapeutic nature of female-to-female mentoring relationships and stated that women may receive ancillary benefits beyond those normally accrued through the mentoring process. Gloria et al. (1999) emphasized the importance of having ethnically similar mentors especially for minority students on predominantly White

college campuses. This research study did not specifically ask gender or ethnicity of each participant's mentor. This unknown variable could have had an effect on the significance of the relationship between mentoring relationships and disordered eating in this study.

Supportive mentoring relationships can be an important part of a student's adjustment to college by assisting with academic achievement, confidence, leadership skills, and/or career direction but may not necessarily embody the growth-fostering relational components of mutuality, authenticity, and empowerment or zest. It is therefore possible that mentor relationships, unlike peer and community relationships, might not significantly relate to the attitudes and behaviors of disordered eating in college females in this study.

Research Questions and Explanations of Findings

Research Question 1 examined the relationship between peer relationships and disordered eating. Results from this research indicate that peer relationships were a significant predictor of disordered eating attitudes and behaviors. As the peer relational health of college females increased, disordered eating decreased proportionately. An increase of 1.0 point on the RHI-P scale predicted a decrease of 0.5 on the EAT-26 score. This finding is consistent with previous research on adolescent peer relationships that has shown that the positive experiences of friendship contribute significantly to cognitive, social, and moral development as well as psychological adjustment and socioemotional health (Brown et al., 1999).

Research Question 2 examined the differences in the relationship between peer relationships and disordered eating among Black, Latina, and White female college

students. Results from this research did not indicate any significant differences among ethnic groups in their relationship between peer relationships and disordered eating. This research finding is consistent with previous empirical research that has shown the value of mutually intimate and nurturing peer support in the physical and psychological health of young women of varied ethnic backgrounds. Peer relational health may act as a protective factor for disordered eating for Black, Latina, and White female college students.

Research Question 3 examined the relationship between mentor relationships and disordered eating. Results from this research did not indicate any significant relationship between these two variables. Relational competence as defined by the Relational Model is the ability to attend to the affect and experience of another individual and then respond in an appropriate manner that compromises neither that individual self nor another (Nelson, 1996). Relational competence leads to mutual empowerment, a state in which each person can receive and then respond to the feelings and thoughts of the other, each is able to enlarge both her own and another person's feelings and thoughts, and simultaneously each person enlarges the relationship (Miller & Stiver, 1997). This principle of mutuality within Relational Theory may not be valid for mentoring relationships and therefore may contribute to the lack of significance in the relationship between mentoring and disordered eating in this study.

As discussed previously, the unique interpersonal dynamics of mentoring relationships can be very helpful to college students' success but may not directly affect the psychosocial well-being of college females and more specifically their struggles with disordered eating. The gender and ethnicity of the participants' selected mentors may

have also affected the potential significance of this relationship with disordered eating. Many eating disordered young women have learned how to successfully compartmentalize their academic pursuits and in the 'short run' may do well in their classes and/or academic activities even though their attitudes and behaviors are congruent with the disordered eating continuum.

Research Question 4 examined whether the relationship between mentor relationships and disordered eating differed for Black, Latina, or White female college students. Results from this research did not indicate any significant differences among ethnic groups and their relationship between mentoring relationships and disordered eating.

Research Question 5 examined the relationship between community relationships and disordered eating. Results from this research indicate that community relationships were a significant predictor of disordered eating attitudes and behaviors. As the community relational health of college females increased, disordered eating decreased proportionately. An increase in 1.0 point on the RHI-C scale predicted a decrease of 0.3 in the EAT-26 score. This research finding is consistent with previous research that shows that resilient adolescents and young adults are sociable and able to seek and garner social support from a variety of resources (Johnson et al., 1999). This interpersonal strength is in contrast to females who struggle with disordered eating and also report a sense of isolation, social anxiety, impoverished relationships, public self-consciousness, and a failure to seek social support (Szmukler et al., 1995). Community relational health may act as a protective factor for disordered eating for Black, Latina, and White female college students.

Research Question 6 examined the differences in the relationship between community relationships and disordered eating among Black, Latina, and White female college students. Results from this research did not indicate any significant differences among ethnic groups in their relationship between community relationships and disordered eating. In other words, female college students who had higher community relational health also had lower disordered eating regardless of their specific ethnic background.

Researchers who have examined sense of belonging, a primary construct of community relational health, for Black and Latina females state that the cultural construct of interdependence which starts during childhood and involves a familial type of attachment to community serves as a personal strength which can help to mitigate feelings of isolation and detachment (Harris, 1992; Hurtado & Carter, 1997). Community relationships that promote a sense of belonging and are defined by the growth-producing qualities of the Relational Model have had a beneficial influence on the physical and psychological health of women from various ethnic backgrounds in numerous research studies. This benefit may also extend to helping in the prevention of disordered eating in Black, Latina, and White female college students.

Research Question 7 examined the relationship among Black, Latina, and White female college students' disordered eating. Results from this research indicated that there were ethnic group differences. Black female mean scores on the EAT-26 were lower than both Latina and White female mean scores, which did not significantly differ from each other. Lower scores on the EAT-26 indicate lower levels of disordered eating attitudes and behaviors.

Root (1990) stated that racial/cultural context may afford protection from disordered eating to an ethnic group, but it does not necessarily protect individuals who are subject to the standards of the dominant Western culture. This study did not examine issues related to acculturation and assimilation that may have affected the survey results of the different ethnic groups in this research question. It also did not include the variable of actual body weight, which may also have affected the results of this question. Research has shown that there is a positive association between extent of body dissatisfaction and actual body weight in samples of Black female college students but White female college students were likely to adopt disordered eating attitudes and behaviors regardless of actual weight (Abrams et al., 1993). Similar studies that examine the dynamics of actual body weight and disordered eating have not been done with Latina college students. Other research studies have generally shown that Black women compared to White and Latina women tend to be more satisfied with their bodies, are more accepting of being overweight, and are less driven to achieve thinness (Abrams et al., 1993; Fitzgibbon et al., 1998). These aforementioned factors may have played a part in the lower levels of disordered eating in Black female participants in this study.

Research Question 8 examined the relationship among Black, Latina, and White female college students' peer relationships. Results from this research indicated that there were ethnic group differences. Black female mean scores on the RHI-P were lower than both Latina and White female mean scores, which did not significantly differ from each other. Lower scores on the RHI-P indicate lower levels of peer relational health in accordance with the Stone Center's Relational Model.

Sedlacek's (1999) meta-analysis of twenty years of research on Black students on predominantly White college campuses found that racism remains a major problem for Black students across the country. This research study was done at a large co-ed university in the southeastern United States where Black students comprise only 6.5% (2,900) of the student population and Black female undergraduate students comprise less than half of that total (University of Florida, 2000). The difficulty of 'fitting in' and finding compatible peers may be difficult for many young Black women in this study. Various research studies document the difficulty that Black students face in the arena of social adjustment on predominantly White college campuses. Though Latina students are also a minority on this research study campus (9.4%; 4,200; University of Florida, 2000), and probably deal with racism on an individual and institutional level, it is possible that they may assimilate more easily into the White college campus environment and are more able to find mutually intimate and nurturing peers. The results of this research question may also have been affected by the lower response rate of the Black female participants.

Research Question 9 examined the relationship among Black, Latina, and White college females' mentoring relationships. Results indicated that there were no significant ethnic group differences in the mean scores of the RHI-M. This research result may be attributed to the fact that the instructions for this survey scale were flexible and allowed the participants to select any "adult who is often older than you, and is willing to listen, share her or his experiences, and guide you through some part or area of your life." Several participants indicated that they chose a parent or close relative as their mentor. For minority students, this choice flexibility may have contributed to the lack of

significance between group differences by giving Black and Latina women the ability to identify mentors outside of the university setting. This study result may have been different if mentors had been required to be affiliated with the university research study site. In addition, the university in this study has an active on-going mentoring program for minority students, which may have decreased ethnic group differences. It is assumed that White female students on their own could more easily find a same gender/ethnicity mentor if that was a priority. Another factor that should be considered is the difference in response numbers (Black, 59; Latina, 72; White, 90) for the RHI-M, which may have affected the results of this research question. This was the smallest response sample of the three RHI scales and this research question result may have been statistically significant with a larger sample.

Research Question 10 examined the relationship among Black, Latina, and White college females' community relationships. Research results indicated ethnic group differences in the mean scores of the RHI-C. Black mean scores were lower than White mean scores, but Latina scores were not significantly different from Black or White mean scores. Lower mean scores on the RHI-C indicate lower levels of community relational health. As previously discussed, lower levels of community relational health for Black college females may be attributed to their struggles with racism and assimilation within a predominantly White college campus. Latina mean scores, though not statistically significantly different, were between Black and White mean scores and may also indicate a difficulty with cultural assimilation but not to the same degree as for Black female students.

In conclusion, the findings of the research questions in this study indicated that both peer and community relationships significantly predicted disordered eating attitudes and behaviors and may be protective factors in disordered eating for Black, Latina, and White female college students. Mentor relationships were not significantly related to disordered eating in college females as a whole or for any of the specific ethnic groups. Black female participants had lower levels of disordered eating when compared with Latina and White female students. Black female participants also had lower levels of peer and community relational health. Ethnicity and the interactions of ethnicity with relational health in this study did not prove to be significant variables in the relationship between disordered eating and relational health.

Limitations of the Study

This study used a stratified randomized sample of sophomore, junior, and senior undergraduate Black, Latina, and White college females from a large co-ed university in the southeastern United States. Therefore, generalizability of the findings of the current study would be limited primarily to undergraduate Black, Latina, and White female college students. It is also important to recognize that the composition of Black and Latina ethnic groups vary within the United States and therefore the generalizability of this study may be limited to the southeastern region of the United States.

This study was limited by the exclusive reliance on self-report measures to assess peer, mentor, and community relational health and disordered eating. Self-report instruments are susceptible to respondent bias though they are also considered to be an efficient method for obtaining data in a relatively nonobtrusive and confidential manner.

Respondent bias may have been a problem in this study due to the personal nature of the questions related to interpersonal relationships and eating attitudes and behaviors.

Another limitation to the study is the self-selection of the participants receiving the mail surveys. Overall the response rate was 49.3%, but among ethnic groups there was a variable response rate (Black, 42.5%; Latina, 48.1%; White, 58.1%). Even though ethnicity did not prove to be a significant variable, the unique ethnic composition of the entire participant group could potentially be a limitation to generalizability. In addition, questions arise about the unknown characteristics of the non-participating group and the unknown reasons for response variability among ethnic groups.

A critical limitation inherent to the correlational nature of this research design involves the inability to ascertain causal connections. The findings show a correlation between relational health and disordered eating, but there is no way of knowing whether poor relational health brings about disordered eating or vice versa, or even if there were other unidentified factors at work. This study was only a first step in understanding the role of relationships and disordered eating attitudes and behaviors in college women.

Implications of the Findings and Recommendations

Findings from this research study have added to an increased understanding of the relationship between peer, mentor, and community relationships and disordered eating in Black, Latina, and White female college students. Implications for theory, practice, and research are presented in the following chapter section.

Implications for Theory

The theoretical intent of this research study was to test a model of female psychological development with disordered eating attitudes and behaviors within a multicultural female college population. The results of the study offered mixed support for the elements of the proposed model. Research findings showed that relational health, specifically peer and community but not mentor relationships, were related to disordered eating. Ethnicity and the interaction of ethnicity with relational health did not play a significant role in this relationship.

According to the principles of the Stone Center's Relational Theory, the goal of healthy psychological development for girls and women is attained via the increasing ability to build and enlarge mutually enhancing relationships in which each individual can feel an increased sense of well-being through being in touch with others and finding ways to act on individual thoughts and feelings (Surrey, 1985). The results of this study reinforced the tenets of this theory by showing that there is a negative relationship between peer and community relational health and disordered eating. Disordered eating being recognized as symptomatic of a decreased sense of well-being. The finding that ethnicity was not a significant factor in the research model can be interpreted as a strength of Relational Theory. According to the findings of this study, Black, Latina, and White female college student participants all showed a negative relationship between peer and community relational health and disordered eating and therefore, in this study, the Relational Model is relevant for a multicultural population sample.

The vast majority of empirical research on Relational Theory has been conducted primarily through qualitative studies. The results of this research study add to the body

of quantitative research literature that proposes that the formation and maintenance of relationships and connections to others is critical to healthy female psychological development. The results of this study are also consistent with numerous other studies on the benefits of social support as being health promoting by providing a sense of belonging and relational intimacy.

Implications for Practice

The immediate and practical implications of this research will be of interest to university administrators, health educators, and campus mental health providers. It is important to understand the struggles of college women with disordered eating and the potential protective factors of peer and community relationships.

Most eating disorder inpatient programs provide a predominantly female community for patients, with an emphasis on group therapy. These programs emphasize the importance of the building of intimate connections as a treatment goal in the healing of women struggling with disordered eating. Colleges can learn from this type of intervention and make group experiences available for all women on campus as part of their education, prevention, and eating disorder intervention strategies.

On-going campus groups that focus specifically on issues related to body image, eating problems, healthy coping strategies, and personal growth should be easily and routinely available for the female college population. These groups should be facilitated by someone who is familiar with the Relational Model's principles of mutuality, authenticity, and empowerment or zest and thereby create a beneficial group experience within the framework of the community relational model. It would be important to target in-coming freshman and transfer students who are dealing with the uncertainties of life

transition and college adjustment especially at large university campuses that may seem unfriendly and alien to the new student. It would be imperative to also insure that all group environments were culturally sensitive so that a diverse group of college women would benefit.

College women who struggle with disordered eating would also benefit from individual therapy with feminist therapists who believe that it is crucial to build an egalitarian relationship between the client and the counselor (Worell & Remer, 1992). This type of collaborative therapy model embraces the relational principles of mutuality, authenticity, and empowerment or zest and potentially would be beneficial in helping the female college student more effectively deal with her disordered eating issues along with the other stressors that are prevalent during this developmental stage of her life.

Implications for Research

There are a number of directions that future research could take based upon the results of this study. To increase the external validity of current results that correlate relational health with disordered eating, it will be important to employ a similar research design with different age groups, ethnic groups, and with girls and women from varied socioeconomic and educational backgrounds. Most of the previous eating disorder research has been done with groups of White females. It is important to continue to do empirical research with multiculturally diverse groups of college females with large ethnic research groups.

This study could be replicated and potentially strengthened by including measures of ethnic acculturation and/or assimilation. With these added variables, ethnicity may

prove to be a significant main effect. Also, including the variable of actual body weight could give valuable research information.

Clarifying the definition of mentor as it applies to the female college student population could strengthen the construct of mentor relational health. If mentoring is to be included in the Stone Center's Relational Model, then the elements of mutuality, authenticity, and empowerment or zest should be more readily apparent within this type of relationship.

Longitudinal research needs to be done to determine whether relational health and disordered eating varies with the progression of the college experience. This type of research would be helpful in determining how and when college personnel should most effectively intervene with prevention and education strategies.

Summary

In conclusion, this researcher has described the relationship between relational health and disordered eating in Black, Latina, and White female college students. Regression equations were performed to test if levels of peer, mentor, and/or community relational health would predict disordered eating attitudes and behaviors in a multicultural female college population. Ethnicity and the interactions of ethnicity with relational health were also included as possible predictors. Several ANOVA's were also performed to test whether there were any between ethnic group differences in the three types of relational health. The results of the data analysis indicated that peer and community relationships were significant predictors of disordered eating but mentoring relationships did not correlate significantly with disordered eating. Ethnicity and the interactions of ethnicity with relational health were also not significant predictors of

disordered eating in college females. Black college females in this study had lower levels of disordered eating than both Latina and White college females. Black college females also had lower peer and community relational health than Latina and White females. There were no ethnic group differences in mentor relational health.

A large majority of female college students across the United States suffer with the physical, psychological, and social ramifications of the disordered eating continuum. It is imperative that college administrators, health educators, and campus mental health providers take a proactive stance in this nationwide college health epidemic. Most researchers agree that eating disorder etiology is multifactorial. The findings of this research reveal a probable correlation between relational health and disordered eating and therefore a possible inroad for campus education, prevention, and intervention programs that are relevant and potentially beneficial to a diverse group of college females.

APPENDIX A
COVER LETTER

October 2, 2000

Dear Student,

Please accept this invitation to participate in a study that seeks to describe the role of different kinds of relationships and eating patterns in the lives of female college students. I am a counselor and doctoral student at the University of Florida. In my work, I have personally seen how difficult the adjustment to college life can be for many female students. It is my hope that the results of this study will help university administrators, counselors, and health educators better understand the experiences of female college students and create ways to help with their struggles.

I estimate that your participation in this study should take **no more** than 15 minutes to complete the enclosed survey. Possible benefits might include an increased awareness of your own thoughts and beliefs. I foresee no risks. The results of this study will be kept strictly confidential to the extent provided by law and will be used for research purposes only.

Your participation in this study is completely voluntary and, if at any time you wish to withdraw from the study, you may without any penalty. You do not have to answer any question you do not wish to answer. If you do decide to participate in this study, please fill out the two instruments and return both of them in the enclosed self-addressed stamped envelope. Thank you very much for taking the time to be a participant in my research. Your responses are a very important part of the overall study and may help other female students in the future.

If you have any questions about this study, please contact me at any time. My phone number is 332-5506 and my mailing address is PMB 35, 7257 NW 4th Boulevard, Gainesville, FL 32607. You may also contact my faculty supervisor, Dr. James Archer at 392-0731. Questions or concerns about your rights as a participant may be directed to the University of Florida Institutional Review Board (UFIRB) at PO Box 112250, Gainesville, FL 32611, 392-0433.

Thank you very much for your time and assistance.

Sincerely,

Lynne Goldman, M.Ed., Ed.S.

APPENDIX B
THE RELATIONAL HEALTH INDICES

I. Next to each statement below, please indicate the number that best applies to your relationship with a close friend, someone whom you feel attached to through respect, affection, and/or common interests. Someone you can depend on for support and who depends on you.

1 = Never; 2 = Seldom; 3 = Sometimes; 4 = Often; 5 = Always

- ___ 1. Even when I have difficult things to share, I can be honest and real with my friend.
- ___ 2. After a conversation with my friend, I feel uplifted.
- ___ 3. The more time I spend with my friend, the closer I feel to him/her.
- ___ 4. I feel understood by my friend.
- ___ 5. It is important to us to make our friendship grow.
- ___ 6. I can talk to my friend about our disagreements without feeling judged.
- ___ 7. My friendship inspires me to seek other friendships like this one.
- ___ 8. I am uncomfortable sharing my deepest feelings and thoughts with my friend.
- ___ 9. I have a greater sense of self-worth through my relationship with my friend.
- ___ 10. I feel positively changed by my friend.
- ___ 11. I can tell my friend when he/she has hurt my feelings.
- ___ 12. My friendship causes me to grow in important ways.

II. Next to each statement below, please indicate the number that best applies to your relationship with your most important mentor, an adult who is often older than you, and is willing to listen, share her or his experiences, and guide you through some part or area of your life.

1 = Never; 2 = Seldom; 3 = Sometimes; 4 = Often; 5 = Always

- ___ 1. I can be genuinely myself with my mentor.
- ___ 2. I believe my mentor values me as a whole person (e.g., professionally/academically and personally).
- ___ 3. My mentor's commitment to and involvement in our relationship exceeds that required by his/her social/professional role.
- ___ 4. My mentor shares stories about his/her own experiences with me in a way that enhances my life.
- ___ 5. I feel as though I know myself better because of my mentor.
- ___ 6. My mentor gives me emotional support and encouragement.
- ___ 7. I try to emulate the values of my mentor (such as social, academic, religious, physical/athletic).
- ___ 8. I feel uplifted and energized by interactions with my mentor.
- ___ 9. My mentor tries hard to understand my feelings and goals (academic, personal, or whatever is relevant).
- ___ 10. My relationship with my mentor inspires me to seek other relationships like this one.
- ___ 11. I feel comfortable expressing my deepest concerns to my mentor.

III. Next to each statement below, please indicate the number that best applies to your current relationship with a group or community such as a sorority, dorm floor, religious organization, sport/athletic team, volunteer organization and/or interest club.

1 = Never; 2 = Seldom; 3 = Sometimes; 4 = Often; 5 = Always

- ___ 1. I feel a sense of belonging to this community.
- ___ 2. I feel better about myself after my interactions with this community.
- ___ 3. If members of this community know something is bothering me, they ask me about it.
- ___ 4. Members of this community are not free to just be themselves.
- ___ 5. I feel understood by members of this community.
- ___ 6. I feel mobilized to personal action after meetings within this community.
- ___ 7. There are parts of myself I feel I must hide from this community.
- ___ 8. It seems as if people in this community really like me as a person.
- ___ 9. There is a lot of backbiting and gossiping in this community.
- ___ 10. Members of this community are very competitive with each other.
- ___ 11. I have a greater sense of self-worth through my connection with this community.
- ___ 12. My connections with this community are so inspiring that they motivate me to pursue relationships with other people outside this community.
- ___ 13. This community has shaped my identity in many ways.
- ___ 14. This community provides me with emotional support.

APPENDIX C
THE EATING ATTITUDES TEST-26

Next to each statement below, please indicate a numbered response for each of the following questions:

1 = Never; 2 = Rarely; 3 = Sometimes; 4 = Often; 5 = Usually; 6 = Always

- ___ 1. Am terrified about being overweight.
- ___ 2. Avoid eating when I am hungry.
- ___ 3. Find myself preoccupied with food.
- ___ 4. Have gone on eating binges where I feel I may not be able to stop.
- ___ 5. Cut my food into small pieces.
- ___ 6. Aware of the calorie content of foods that I eat.
- ___ 7. Particularly avoid food with high carbohydrate content (i.e., bread, rice, pasta, potatoes, etc.)
- ___ 8. Feel that others would prefer if I ate more.
- ___ 9. Vomit after I have eaten.
- ___ 10. Feel extremely guilty after eating.
- ___ 11. Am preoccupied with the desire to be thinner.
- ___ 12. Think about burning up calories when I exercise.
- ___ 13. Other people think that I am too thin.
- ___ 14. Am preoccupied with the thought of having fat on my body.
- ___ 15. Take longer than others to eat my meals.
- ___ 16. Avoid foods with sugar in them.
- ___ 17. Eat diet foods.
- ___ 18. Feel that food controls my life.
- ___ 19. Display self-control around food.
- ___ 20. Feel that others pressure me to eat.
- ___ 21. Give too much time to the thought of food.
- ___ 22. Feel comfortable after eating sweets.
- ___ 23. Engage in dieting behavior.
- ___ 24. Like my stomach to be empty.
- ___ 25. Enjoy trying new rich foods.
- ___ 26. Have the impulse to vomit after meals.

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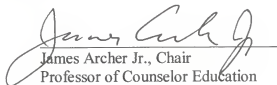
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BIOGRAPHICAL SKETCH


Lynne G. Goldman was born on January 22, 1947, in Philadelphia, Pennsylvania, to Sidney and Ruth Greenstein. She grew up in Miami, Florida, and attended North Miami High School. In 1968, she graduated from the University of Miami with a B.Ed. in elementary education. In 1969, she married Richard Goldman and moved to Gainesville, Florida, to continue her teaching career while he began his journey to become a veterinarian. Lynne taught elementary school for six years before giving birth to her first son, Brian, in 1976. Her second son, Michael, was born in 1980. After working part-time in her husband's veterinary hospital, she returned to college and earned an A.S. in graphic design technology at Santa Fe Community College. She worked as a graphic designer and adjunct professor in graphic design at SFCC before beginning graduate school in counselor education at the University of Florida in 1992. She earned her M.Ed. and Ed.S. in counselor education in 1995. She subsequently entered the doctoral program in counselor education at UF and also worked part-time in private practice and at the university's Student Mental Health Service located in the Student Health Care Center. In 2000, Lynne became a Licensed Mental Health Counselor and staff psychotherapist at the University of Florida's Student Mental Health Service. Her clinical work is focused primarily on women's issues with a specialization in trauma and abuse and eating disorders. Her hobbies include travel, reading, and riding a motorcycle with her husband.

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.



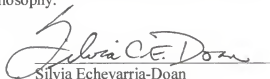
James Archer Jr., Chair
Professor of Counselor Education

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Silvia Echevarria-Doan
Associate Professor of Counselor
Education

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.



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This dissertation was submitted to the Graduate Faculty of the College of Education and to the Graduate School and was accepted as partial fulfillment of the requirements for the degree of Doctor of Philosophy.

May 2001



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